EVIDENTIALITY IN ENGLISH AND POLISH

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ABSTRACT

This thesis provides a synchronic account of evidentiality in English and Polish and the main ideas associated with the research on evidentiality with reference to these languages. Chapter 1 provides the review of main ideas as presented in the literature on the topic. Linguists provide varied definitions of evidentiality, therefore chapter 2 gives a unified description of evidentiality, understood as an independent grammatical and semantic category, and offers an organised account of its semantic types and sub-types. Chapter 3 and 4 analyse evidentiality in English and Polish, respectively, describing various lexical items with evidential meaning. Chapter 5 addresses the issue of the relation between evidentiality and other grammatical categories, while the final chapter looks at the correlation between evidentiality and epistemic modality.

Key words: evidentiality, epistemic modality, English, Polish, perception verbs

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ABBREVIATIONS

Abbreviation	Meaning
1	first person
2	second person
3	third person
A	transitive subject function
ABL	ablative
ABS	absolutive
ACC	accusative
ACT	active
ADJ	adjective
ANIM	animate
AOR	aorist
ART	article
ASP	aspect
ASSERT	assertive
ASSM	assumptive
ATTR	attributive
AUD	auditory
AUG	augmentative
AUX	auxiliary
BEN	benefactive
CATEG	category
CIRC	circumstantial
CL	classifier
CNTR	contrast
COMP	comperative
COMPL	completive
COND	conditional
CONJ	conjunction
COP	copula
CSM	change of state marker
DAT	dative
DECL	declarative
DEDC	deductive
DEF	definite
DIR	directive
ERG	ergative
EV	evidential
EXT	extent
FEM / f	feminine
FIRSTH	firsthand
FOC	focus
FUT	future

GEN	genitive
GER	gerund
HEAR	hearsay
IM	synthetic imperfect
IMM	immediate past
IMP / IMPV	imperative
IMPRFCTV	imperfective
INANIM	inanimate
IND	indicative
INESS	inessive
INF	infinitive
INFER / INFR	inferred
INS / INST / INSTR	instrumental
INTER	interrogative
INTR	intransitive
LOC	locative
MAN	purpose-manner converb
MASC	masculine
NCL	noun class
NEUT	neuter
NF	non-feminine
NOM	nominative
NOMN	nominalisation
NONFIRSTH	non-firsthand
NONTHIRD	non-thirdhand
NONVIS	non-visual
NUM.CL	numeral classifier
O	transitive object function
OBJ	object
OBL	oblique
OR	orientation (direction) marker
p	proposition
P	past
PART	participle
PASS	passive
PAST / PST	past
PC	particle of concord
PERF	perfect
PL	plural
PLT	plurale tantum
POSS	possessive
PRED	predicative verb
PREF	prefix
PREP	preposition
PRES / PRS	present
PRFCTV	perfective

PRON	pronoun
QUOT	quotative
REC	recent
REFL	reflexive
REL	relative
REM	remote
REP	reported
S	intransitive subject function
SENS	sensory
SG	singular
SGT	singulare tantum
SPECL	speculative
SS	same subject
STAT	stative
SUB / SUBJ	subjunctive
SUP	superlative
TOP	topic
TOP.NON.A/S	topical non-subject case
TR	transitive
V	verb
VIS	visual
VOC	vocative
WIT	witnessed

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INTRODUCTION

The analysis of evidentiality, as a linguistic category, is a relatively young branch of study. The first publication entirely devoted to the topic was Evidentiality: The Linguistic Coding of Epistemology edited by Chafe and Nichols in 1986 (Dendale & Tasmowski 2001: 340). Since then, evidentiality has received more and more attention and has been researched by many linguists. As a fairly new area of research, evidentiality is described differently by scholars. To the confusion and differences of opinions adds the fact that linguists analyse evidentiality based on various languages. This thesis aims to provide a synchronic account of evidentiality in English and Polish. Before the analysis of both languages is presented, however, it is necessary to collate and organise main issues involved with the analysis of evidentiality across various linguistic systems.

The first chapter of this thesis presents literature review of the main works on evidentiality: Aikhenvald (2003, 2004), De Haan (2003a, b, 2005), Palmer (1986, 2001) and Rooryck (2001a, b). Ideas presented by the linguist in chapter 1 differ, sometimes in large respect. The main points addressed when reviewing the works are: what evidentiality is and how it should be categorised, and the relationship between evidentiality and other semantic and grammatical categories. Because linguists approach the issues relating to evidentiality differently, sometimes giving diverse answers to the same questions, the issues are re-addressed in further chapters in an attempt to provide a unified account of evidentiality.

Chapter 2 provides a unified description of evidentiality with reference to epistemic modality and offers a classification of different types and sub-types of evidential meanings.

Chapters 3 and 4, address the main topic of this thesis, *id est.* how evidentiality is represented in English (chapter 3) and Polish (chapter 4). The analysis of both languages follows the semantic categorisation of evidentiality types from chapter 2. Since neither English nor Polish have grammaticalised evidentials, the chapters describe various lexical items that indicate various evidential meanings.

Chapter 5 describes the relation between evidentiality and other grammatical categories such as person, tense, aspect, negation. It also investigates how a sentence

type (questions and commands) influences evidential meaning. The analysis is based on various languages of the world and applied to English and Polish.

Chapter 6, the final chapter of this thesis, re-addresses the issue of the relation between epistemic modality and evidentiality, including the problem if evidentiality contributes to the proposition expressed in a sentence. Again, the investigation is based on various languages as presented in the literature on the topic, and followed by the application of findings to English and Polish.

The thesis finishes with conclusions summarising the main ideas presented throughout the work.

CHAPTER 1. EVIDENTIALS – LITERATURE REVIEW

Evidentiality has received a lot of attention in recent literature. Analyses focus on either a cross-linguistic study of the topic, or on individual languages. Languages code evidentiality in various ways: there are languages with obligatory morphosyntactic system of evidentials, like languages of Americas or in parts of Asia. Other languages use not only verbal affixes, but also clitics, particles etc. European languages, on the other hand, use other devices to mark evidentiality. English, for instance, uses lexical evidentials such as adverbs, propositional or modal verbs, etc. (Chafe *et. al.* 1986). One of the first works on evidentiality is the volume edited by Chafe and Nichols (1986). It is a collection of articles by linguists investigating evidentials in many different languages. Evidentiality there is shown as a speaker's attitude towards knowledge presented in a sentence. Other linguists, like Aikhenvald (2003) or De Haan (2005) oppose the idea that evidentiality may be interpreted as part of any modal system. Aikhenvald claims that proper evidentials are present in only those languages where evidential meanings are represented by a set of grammatical devices (morphemes), not lexical ones (adverbs, modals and alike). De Haan, on the other hand, analyses evidentiality as a deictic, not modal, category. Both linguists, though, agree that even languages with no obligatory evidential system have ways of indicating evidential meanings, and so evidentiality and epistemic modality may be related (to be discussed in further chapters).

Even though the representation of evidentiality is so varied across languages, there seems to be more consensus as to the semantic definition of evidentiality among linguists: evidentiality essentially provides the source of information: an indication as to how the evidence was obtained. There are two main types of evidence: direct and indirect. Direct evidentials typically refer to sensory evidence (visual and non-visual) and usually grammaticalise from perception verbs of seeing or hearing. Indirect evidentials do not usually involve sensory evidence, they include quotatives (report, hearsay) or deductive, assumptive evidentials (Palmer 1986, Aikhenvlad 2003).

Below I present the ideas of Rooryck (2001a, b), Aikhenvald (2003), De Haan (2005), and Palmer (2001) to show how different linguists analyse evidentiality.

Rooryck (2001 a & b) describes evidentials as grammatical markers that "put in perspective or evaluate the truth value of a sentence both with respect to the source of

information contained in the sentence, and with respect to the degree to which this truth can be verified or justified" (2001: 125). The information can be justified by either "immediate" (visual) evidence or inference. Rooryck (2001a: 126, after Schlichter 1986) gives an example of a Northern Californian language Wintu to illustrate an array of evidential markers present in just one language and their semantic meanings. Sentence (1.1) is an example of a non-visual sensorial marker *–nthEr*:

(1.1) Q'otisa-bint^{h}eresken
strong-IMPF-you
'You are strong (I feel)' (Said while wrestling)

This evidential has grammaticalised from the verb *mut-* meaning 'hear, feel, perceive, sense', it is used for facts obtained via the speaker's senses, but other than vision. Second sentence illustrates a non-sensory hearsay evidential marker-*ke*:

(1.2) Minel kirke·m
die COMPLETIVE.DUBITATIVE.3P
'He has died (I'm told)'

This verbal suffix is related to 'potentiality, maybe' and derives from *kEl* meaning 'far, distant, far (from the here and now) (Pitkin 1984: 133). Sentence (1.3) is an example of a visual deduction/inference evidential *-re:*

(1.3) Niçcayn ?ewin sukere·.
nephew here stand
'My nephew must have been here (I see tracks)'

This evidential has grammaticalised from the verb meaning 'see, look', it means that the speaker presents the fact based on his or her sensory, visual evidence (Schlichter 1986).

The final evidential present in Wintu is the marker *-?el:*

(1.4) Tima mine?el pira·?el

cold die starve

'He might starve to death' (he is expected to starve to death)

Sentence (1.4) exemplifies an expectational evidential, as per Rooryck (2001a: 126) "speaker believes proposition to be true on basis of previous similar, experience, or experiences regularly occurring in human life, also hearsay, grammaticalised from a verb meaning 'to exist'".

As can be seen from the above examples, Wintu has a system of four evidentials – verbal suffixes, mostly grammaticalised from verbs of perception. In this case, sensory (visual and non-visual) and non-sensory (hearsay and experiential) evidence is combined in one system. The evidential morphemes above, are usually translated into English or other languages with no obligatory evidential system through sentence adverbs of type: *apparently, obviously, clearly,* etc.

Rooryck says that evidentials are not the same as other related categories such as subjective epistemic modals and evaluative markers. He notices, however, that all three categories share some properties such as "a source of information" (who is responsible for the information status, it may or may not involve the speaker) and "evidence type" (reliability, probability, expectation, desirability). Rooryck notes also that there are limited ways in which "source of information" and "evidence type" can combine: for instance visual evidentials usually have 1st person source, while quotatives – 3rd person. Sentence (1.5) illustrates evidential marker is the word *ámbo* from Lega:

(1.5) ámbo Amisi ɛ́zi nzelá

Ev. Amisi 3S-know path

'[They say/I hear tell (that)] Amisi knows the way'

This evidential marker can be historically traced back to the third person plural pronoun (Bantu, Eastern Congo) (Rooryck 2001a: 126-7, after Botne 1995).

As to the origin of evidentials, they grammaticalise not only from personal pronouns (example (1.5) above), or perception verbs (like Wintuan *–nthEr* for non-visual perception or *–re* for visual perception), but also from verbs of saying, like sentence (1.6) below. This

sentence is taken from West Greenlandic and shows a quotative evidential particle *unnia-* (Fortescue 1986: 296):

(1.6) unnia Qaanaa-mi najugaqar-tuq
unnia Qaanaaq-LOC live-3SG+PART
'They say he lives at Quaanaaq (would you believe).'

The speaker of the above sentence repeats what others have said, the evidential used here has grammaticalised form verbal stem *unnir-* meaning 'say (that)'.

Evidentiality may also be expressed via other means, not only evidential markers as in languages cited above. Languages that have no evidential system can still express evidential meaning. Examples below show what other ways of expressing evidential meaning can be found across languages (Rooryck 2001b). One way of expressing evidential meaning is through modal verbs with epistemic reading, as in (1.7) below:

(1.7) Es soll bisher vier Tote gegeben haben
It must until now four dead occurred have
'There seem to have been four dead by now.'

In sentence (1.7) German modal verb *sollen* has acquired an evidential hearsay meaning (Rooryck 2001b: 166, after Cinque 1999). Sentence (1.8) below is an example of a different construction, passive participle used:

(1.8) Jo (yra) rašo-ma laišk-as
he-GEN is write-PASS.PRS.NOM letter-NOM
'He is evidently writing a letter.'

The Lithuanian passive form *rašo-ma* above expresses an inferential meaning not based on a direct, sensory evidence. Sentence (1.9), also from Lithuanian, on the other hand, uses an active participle to *–ęs* to express 'reportative (hearsay) meaning' (Rooryck 2001b: 166, after Gronemeyer 2001).

(1.9) Jis buv-ęs labai pa-varg-ęs
he be-ACT.PST.NOM.SG very PFV-tire-ACT.PST.NOM.SG
'He, they say, was very tired.'

As in example (1.8), in sentence (1.9) the evidential meaning has not been acquired through direct, sensory evidence, the reported evidential meaning derives from active participle. Examples (1.10) a. – c., on the other hand, illustrate the use of present perfect:

(1.10) a. Gel -miş -im (Turkish)
come PERF 1SG
b. Azsâm došâl (Bulgarian)
I be-SG.PRES come-P.PART
c. Jeg har kommet (Norwegian)
I have-1SG.PRES come-P.PART
'I have come/I apparently came.'

The different languages cited in (1.10) code indirect evidence: either rumour or inference (Rooryck 2001b: 166, after Izvorski 1997).

Rooryck's (2001a, b) raises an important issue of the relationship between evidentiality and epistemic modality. His definition of evidentiality includes both 'source' and 'reliability' of information. Hence, evidentiality can be understood as part of epistemic modality: not only evidential markers in languages with evidential systems can be translated into other languages via epistemic modals, both evidentiality and epistemic modality share the same characteristics as per Rooryck (2001a: 125) in that they "relativize or measure the information status of the sentence". He based his studies not only on languages with obligatory, grammaticalised system of evidential markers (morphemes), but also on European languages that use other means of expressing evidential meaning (like modal verbs for instance).

Another scholar who deals with evidentiality is A. Y. Aikhenvald (2003). She defines evidentiality similarly to Rooryck (2001a, b) in that it provides a source of evidence for a piece of information and denotes the type of evidence. Contrary to Rooryck, however, Aikhenvald recognises evidentiality as a separate category,

independent of other linguistic categories such as tense, aspect or modality. For Rooryck evidentiality and epistemic modality are related in that both "share two essential properties": 'source of information' and 'evidence type' (2001a: 125). Rooryck's data includes such languages as German or Dutch (examples (1.7) and (1.8)), where epistemic modals can carry evidential meanings. Aikhenvald, contrary to Rooryck, defines evidentiality as an autonomous category, not included within the epistemic modality. For Aikhenvald, evidentiality is a separate semantic and morphological category. Hence, only languages with an obligatory morphosyntactic system of evidentials are considered as having a 'pure' evidential system.

Aikhenvald (2003, 2004) notes, however, that evidentials may be realised by different means in languages. The source of information can be specified lexically: by expressions such as English *I guess, they say, I hear that*, lexical verbs (*allege*, as in *The alleged killer*), adverbs (*reportedly*), particles (Russian *jakoby, mol, deskatj*) or modal verbs (French *devoir*). However, the only evidentials constituting a separate category of evidentiality are grammatical markers, not lexical ones: lexical markers are optional and therefore not included within the category (Aikhenvald 2003: 1-2).

As to the systems of evidentiality, Aikhenvald (2004) distinguishes two main types: systems that indicate the kind of evidence (visual, inference, report etc.) and those that merely "state the existence of a source of information without specifying it". She further notes that languages can combine different systems: a language may have more than one system of evidentiality, complicated systems may involve six distinctions of evidentiality (eyewitness and non-eyewitness, visual, inferred and reported etc.). The linguist differentiated a few two-, three- and four-term systems that appear in various languages. She did not categorise five- and six-term systems as there are few such attested languages. Aikhenvald (2004) organised evidential systems as follows:

A. Evidentiality systems with two choices:
   - A1. firsthand & non-firsthand
   - A2. non-firsthand vs. 'everything else'
   - A3. reported (or 'hearsay')vs. 'everything else'
   - A4. sensory evidence & reported (or 'hearsay')
   - A5. auditory vs. 'everything else'

B. Evidentiality systems with three choices:

B1. direct (or visual), inferred, reported

B2. visual, non-visual sensory, inferred

B3. visual, non-visual sensory, reported

B4. non-visual sensory, inferred, reported

B5. reported, quotative, 'everything else'

C. Evidentiality systems with four choices:

C1. visual, non-visual sensory, inferred, reported

C2. direct (or visual), inferred, assumed, reported

C3. direct, inferred, reported, quotative

The above categorisation of evidential systems depending on the number of evidential markers present in a language proves to be a useful one: it is very easy to see how languages deal with the information source, whether languages have a detailed system with various evidentials to mark different types of evidence, or whether a language differentiates between two types of evidentials only, in which case the evidentials usually cover a wider meaning. Enga (Papuan), for instance, has a two-term evidential system (reported and everything else type) with a suffix *–na* used for quotations. Quechua languages, on the other hand, represent three-term languages: *-mi* is used for direct evidence, *-chi, ch(a)* – conjectural, and *-shi* for reported. Wintu (examples (1.1)-(1.4)) is an example of a language with a four-term system. Sentence (1.11) illustrates a four-term language that combines two types of evidential in one sentence:

(1.11) Manuel ano fi-nu-ti-e

Manuel food eat-INFR.-HEARSAY-DECL

'He said/they say Manuel has eaten' (they didn't see him, but they have direct physical evidence)

Example (1.11) is taken from Tsafiki, here reported evidential combines with an evidential denoting physical evidence (Aikhenvald 2003: 9, after Dickinson 2000: 408).

Semantic meanings of evidentiality may carry a vast array of implications: epistemic meanings, mirative meanings to introduce new, unexpected information,

several inference types, etc. However, the 'core' evidential meaning, according to Aikhenvald, is to present the source of information (2003: 11). Evidentiality seems to be co-dependent on other grammatical categories as well. There has been a noted connection between the perfect and inferential (Turkish for instance), different types of evidentials can be distinguished in the past tense, future typically excludes evidentiality. The correlation between person and evidentiality has also been mentioned before: direct evidentials are usually used with first person. Similar observations have been also noted by Rooryck (2001 a, b). Sentences (1.7) – (1.10) above illustrate that different languages have means to express evidential meaning other than obligatory affixes: modal verbs in German and Dutch can carry evidential meaning of hearsay, participles in Lithuanian are used for inferential or reportative evidentiality, while in Turkish, Bulgarian or Norwegian a present perfect tense has an overtone of indirect (inferred) evidence (Rooryck 2001 a, b).

Aikhenvald (2003) mentions that other grammatical categories may carry evidential meaning as well. Conditionals or non-declarative moods, for example, express 'uncertain information'. Past tense or perfective aspects may have the meaning of 'indirect experience' or 'reported information'. Complementisers may also convey different evidential meanings: sentences (1.12) and (1.13) can serve as examples of English complement clauses after the verb *hear* (Aikhenvald 2003: 19):

(1.12) I heard France beating Brazil.

In sentence 0the verb *hear* is used in its primary auditory meaning.

(1.13) I heard that France beat Brazil.

Sentence (1.13), on the other hand, illustrates the use of *hear* with evidential hearsay meaning.

Such forms, though not falling into the evidential category as recognised by Aikhenvald, may eventually grammaticalise into obligatory evidential markers, as in Macedonian and Albanian where evidential markers evolved from past tense.

De Haan (2005), contrary to Rooryck and Aikhenvald, analyses evidentiality as a deictic category, such as demonstratives, for it "grounds an action or event with

reference to the speaker, just as a demonstrative grounds an object with respect to the speaker", therefore it is a propositional category. (2005: 29). He notes that evidentiality "makes crucial reference to the extralinguistic context" (2005: 6), such as the use of auditory evidentials implies that the action referred to has been heard by the speaker. The speaker, therefore, can be regarded as the centre of the sentence and, because the speaker can be associated with 1st person singular, it pays an important role in the analysis of evidentiality (2005: 6). De Haan opposes the claim that evidentiality may be a modal (epistemic) category: "(e)videntiality *asserts* the evidence, while epistemic modality *evaluates* the evidence" (2005: 3; italics in the original).

The linguist describes different types of evidentiality according to the semantic meanings: visual evidentiality (sentences (1.14)-(1.17)), inference ((1.18)-(1.19)), auditory evidentiality (sentence (1.20)) and quotatives (example (1.21)). Sentence (1.14) is taken from Tuyuca and is an example of a visual evidential *–wi*:

(1.14) díiga apé-wi.
soccer play-VIS.3SG.MASC.PAST
'He played soccer (I saw him play).'

Here the action is witnessed personally in the past, therefore a visual evidential is used (De Haan 2005: 10, after Barnes 1984:257). In sentence, also from Tuyuca, (1.15)) below the same evidential is used:

(1.15) wesé sóe-ri-gɨ nĩĩ-wi.
field burn-RES-MASC.SG AUX-VIS.3SG.MASC.PAST
'He burned his field. (I saw his field and it had been burned)'

This example illustrates the case where a more probable inferential evidential was replaced by a visual one: in this case the action has not been witnessed personally, the very act of burning the field was not witnessed by the speaker, however the visual evidence of the result (the burnt field) was enough in this case to override inferential with visual. (De Haan 2005: 11, after Barnes 1984:259). In (1.16), Sanuma, the special morpheme *kule*, meaning 'near the speaker' is used as a visual evidential:

(1.16) hi ti-nö a hĩta ku-le.
stick CLASS-INST 3SG stand.upright PRES.WIT-near
'It is standing upright by means of a stick.'

This visual evidential has a deictic source ('near') rather than a perception verb (De Haan 2005: 14, after Borgman 1990: 23).

In (1.17), also from Sanuma, a temporal morpheme *ke* is used to distance the action to the time of speaking to express a visual evidence:

(1.17) ipa sai ha hama töpö hasu-ki ke.
my house by visitor 3PL pass.by-FOC IMM.PAST.WIT
'The visitors passed by my house.'

This evidential morpheme is used for situations that have happened in immediate past, witnessed at the moment of speaking, "(h)owever, the two are close enough in the mind of the speaker to warrant the use of *kule* 'near speaker'" (De Haan 2005: 14, after Borgman 1990: 28).

Sentences (1.14) – (1.17)) exemplify different types of visual evidentials. In Tuyuca, the same visual evidential *–wi* is used for a personally witnessed event, as well as for witnessing the result only (where an inferential could otherwise be used). Sentences (1.16) and (1.17) illustrate how visual and deictic morphemes (spatial and temporal) are combined to express visual evidentiality.

Visual evidentiality is related to inferential evidentiality in that it "is used for those instances in which the speaker has not witnessed the action personally, but has witnessed evidential traces of the action" (De Haan 200: 16). Sentence (1.18) below, from Tuyuca, illustrates inferential evidentiality.

(1.18) bóahõã-yu.
rot-INFER.OTHER.PAST
'It rotted.' (Said of a plant after pulling it up to examine it.)

This sentence shows an inferential evidential is used when the situation has been deduced based on the end result (De Haan 2005:16, after Barnes 1984:260). Sentence (1.19), from Kashaya Pomo, is also an example of an inferential:

(1.19) cuhni: muʔt'a-q^{h}.
bread cook-INFER
'Bread has been cooked.' (on coming into a house and detecting an odor)

Here a slightly different type of inferential evidential is used: the indirect, inferred evidence has been combined with direct, personal one, *i.e.* the sense of smell (De Haan 2005:18, after Oswalt 1986:38) .

As can be seen from the above examples, inferential is usually used for actions not personally witnessed, but inferred based on evidence from the end result. However, inferential may also be merged with direct, sensory evidence (as in (1.18) above).

Sentence (1.20) below exemplifies an auditory evidential, which, similarly to visual evidentials, use direct input:

(1.20) nipó-k aksóhka-ha
meat-SUBJ char-AUD
'It sounds like the meat is charring.'

This example taken from Koasati shows an auditory evidential: the speaker has a direct sensory evidence. The evidential marker *ha(wa)* used in this sentence originates from the verb *há:lon* meaning 'hear' (De Haan 2005:22, after Kimball 1991: 206-7).

Example (1.21) illustrates a quotative evidential:

(1.21) uu vwélta n-sahá de chi.
two time COM-do he.RES QUOT
'He did it two times, they say.'

Sentence (1.21), from Ocotepec Mixtec, is an example of a quotative evidential. Quotatives typically illustrate situations when the knowledge of the event was obtained

from someone else. I this case, the input is also verbal, however not personally obtained. The quotative *chi* used in this sentence grammaticalised from the verb *káchi* 'say' (De Haan 2005:22, after Alexander 1988: 190).

Some languages can use one morpheme to illustrate both visual and inferential evidence, or for auditory and quotative evidentials. Sentence (1.22) from Hualapai shows a morpheme *–o* used for direct, visual evidence:

(1.22) Jóhnach sma:kyunyo.
John(a)-ch sma:-k-yu-ny-o
John-SUBJ 3:sleep-SS-AUX-PAST-VIS
'(I witnessed that) John slept.'

The evidential *–o* in the above sentence is used verb-finally. In this position it denotes evidence obtained visually by the speaker (De Haan 2005:19, after Watahomigie et al. 1982:392). In (1.23), the same morpheme is used for an inferential evidential:

(1.23) Jóhnach wa:hm a:mokyuny.
John(a)-ch wa:-h-m a:m-o-k-yu-ny.
John-SUBJ house-DEM-by 3.go.by-INFER-SS-AUX-PAST
'(I have evidence that) John went by the house.'

Here, the same morpheme is placed just before the verb root, in this position it indicates that the evidence has not been obtained directly through visual evidence, but rather the situation has been inferred (De Haan 2005:19, after Watahomigie et al. 1982:392). In Sanuma, example (1.24), the particle *ha* (or *a*) is used to give auditory evidence:

(1.24) wa namo hu a-so-lö noai ha au
2SG hunt go leave-FOC-DIR INDEF.PERF upon your
nao a wani ha huama hisa hãto-ma
mother 3SG DEPR AUD converse at.home secret-COM
'After you had gone out hunting, your mother conversed secretly at home.'

Auditory evidence is usually obtained by the speaker directly, De Haan however says that in the case of Sanuma the evidential *ha (a)* can be ambiguous in reading: the same particle can be used for direct (auditory) evidence as in (1.24) above, as well as for indirect (quotative) meanings as in (1.25) below (De Haan 2005: 24, after Borgman 1990:92):

(1.25) kolo hamö ai töpö a wele-o-ki
bottom LOC other 3PL QUOT go.downriver-PUNCT.ITER-FOC
'Others are going downriver.'

In (1.25) above, as in (1.24), the context determines the correct (auditory vs. quotative) meaning. De Haan notices that in Sanuma the auditory readings are more common, and the reading may also be determined by the verb used in the sentence: auditory meaning can be inferred when verbs of saying are used in the sentence, whereas the use of any other verb usually denotes quotative meaning (De Haan 2005: 24).

Sentences (1.22) and (1.23) show that the same morpheme *–o* is used to indicate both direct, visual evidence, as well as inference, while examples (1.24) and (1.25) show that morpheme *ha(a)* can denote both auditory and quotative evidence. This proves a close relation between visual/inference and auditory/quotative: both pairs of evidentials evolve from the same perception verbs and are used to refer to similar evidence type (with the distinction between direct/indirect evidence).

Languages with no separate evidential category can also use the same lexical means to refer to visual/inferential or auditory/quotative evidential meanings. English makes use of perception verbs and their complements. Sentences in (1.26) use the same verb 'see' in English to denote visual and auditory readings:

(1.26) a. John saw Mary cross(ing) the road.
b. John saw that Mary had crossed the road.

Sentence a. indicates that the speaker has witnessed the event, has a direct, visual evidence. In b., on the other hand, the speaker has only witnessed the result of the event, therefore the sentence has an inferential, rather than visual, evidential overtone (De

Haan 2005: 17). Examples in (1.27), on the other hand, use the verb 'hear' for auditory and quotative meanings:

(1.27) a. I hear Sally sing.

b. I hear that Sally had sung.

Sentence a. indicates direct sensory evidence - the event has been heard by the speaker. Sentence b. has no indication of perception, contrary to a.: the event has been heard by someone else ad reported to the speaker (De Haan 2005: 21).

In examples (1.26) a. and (1.27) a., the speaker has direct perception of the event, as opposed to sentences (1.26) b. and (1.27) b. De Haan accounts for the difference through deictic relationships: in the case of visual/auditory evidentials (in languages with grammaticalised evidentials and those using lexical items to convey similar meaning) the "deictic relationship between the speaker and the action is closer" than in the case of inference/quotative (De Haan 2005: 21).

As can be seen on the basis of numerous examples provided by De Haan from various languages, evidentiality is a complex category that can be represented by several different types of morphemes.

Chafe (1986) and Rooryck (2001 a & b) analyse evidentiality as referring to both the source of information and reliability, or degree of the speaker's commitment to the proposition, therefore they advocate the view that evidentiality and epistemic modality are combined. Aikhenvald (2001) and De Haan (2005), on the other hand, present a view from the other end of the scale: evidentiality and epistemic modality are two completely different and unrelated semantic categories.

A 'mid-point' approach is taken by Palmer (2001)[1]. He presents a typological analysis of modality. He differentiates between two types of modalities: event and propositional modality. Event modality "is concerned with the speaker's attitude towards a potential future event" (2001: 8), and as such is not relevant to the topic of this thesis and is not analysed further. Propositional modality, on the other hand, is concerned with

[1] In the first edition of his Mood and Modality (1986), Palmer presents a different approach: evidential modality is classed as a sub-type of epistemic modality.

the factual status of the proposition, it not only involves “the notions of possibility and necessity”, but also indicates “the degree of commitment by the speaker to what he says” (1986: 51).

Palmer (2001: 8) distinguishes three typological categories of propositional modality: Speculative, Deductive and Assumptive. Speculative is purely epistemic, whereas Deductive and Assumptive are analysed as instances of epistemic and evidential modalities. He suggests that many languages mix judgements and evidential systems, there are, however, languages with “pure” evidential systems (Tuyuca). As to the type of evidentials, Palmer recognises two main categories: Sensory and Reported.

Palmer’s account of evidentiality and epistemic modality raises two questions that are addressed in further chapters: first, what is the true relationship between epistemic modality and evidentiality and how it translates into different languages (those with ‘pure’ evidential systems and those with mixed epistemic-evidential systems), and second, whether epistemic modality and evidentiality operate on the same (non-)propositional level of meaning.

To sum up, the analysis of evidentiality depends not only on the analysed linguistic data, but also on the approach adopted by a linguist. Therefore it is very difficult to find a unified account of evidentiality among linguists. Some authors approach the analysis of evidentiality from a ‘wide’ angle, making epistemic judgement (relativity) part of evidential meanings, others look at evidentiality as pertaining exclusively to the information source. The variation largely depends on an analysed language. If a language has a grammaticalised set of evidential markers, it is likely that the markers will present the information source only, without epistemic overtones. There are a number of languages, however, that do not have a separate set of evidentials, such languages refer to the information source in a different way (modal verbs, adverbs, particles etc.). The fact that modal verbs, for instance, are often used in translations of evidential markers from other languages, or that modal verbs or adverbs also refer to the source of evidence (especially inferred evidentiality), may suggest that evidentiality is part of epistemic modality. It is important, however, to stress that evidentiality and epistemic modality are not the same. Languages with grammaticalised evidentials may develop epistemic overtones, while epistemic modals, for instance, may have the meaning extended to evidential.

This chapter presents an overview of the recent literature on evidentials. When reviewing the literature, the reader may be struck by a number of different attitudes and approaches to the analysis of evidentiality. Therefore, the discussion of evidentiality raises a few important questions. The first, most important question to be answered is the definition of evidentiality. As can be seen, the answer depends on a linguist and may involve 'narrow' or 'wide' account of evidentiality. The 'narrow' account presents evidentials as marking the source of evidence only, while the 'wide' account describes evidentiality as pertaining to the source of evidence and degree of speaker's commitment to the truth of the proposition (merging evidentiality and epistemic modality). The approach taken in this thesis separates the two: evidentiality is understood as a semantic category that pertains to the source of evidence, while epistemic modality presents the speaker's judgement of the truth of the proposition.

Further chapters of this thesis are organised around the main questions raised in this chapter. Chapter 2 provides a brief description of what evidentiality is and how it is defined, as well as offers categorisation of different types of evidentiality (direct and indirect). The categorisation is not based on any particular language, but on the semantic meanings of evidentials across various languages of the world. The categorisation from chapter 2 is followed in chapters 3 and 4, where the ways of indicating evidentiality in English and Polish, respectively, are described. In chapter 5 I look at the relation between evidentiality and other grammatical categories, while chapter 6 re-addresses the issue of the relationship between evidentiality and epistemic modality (including the question whether evidentiality contributes to the proposition like modal operators).

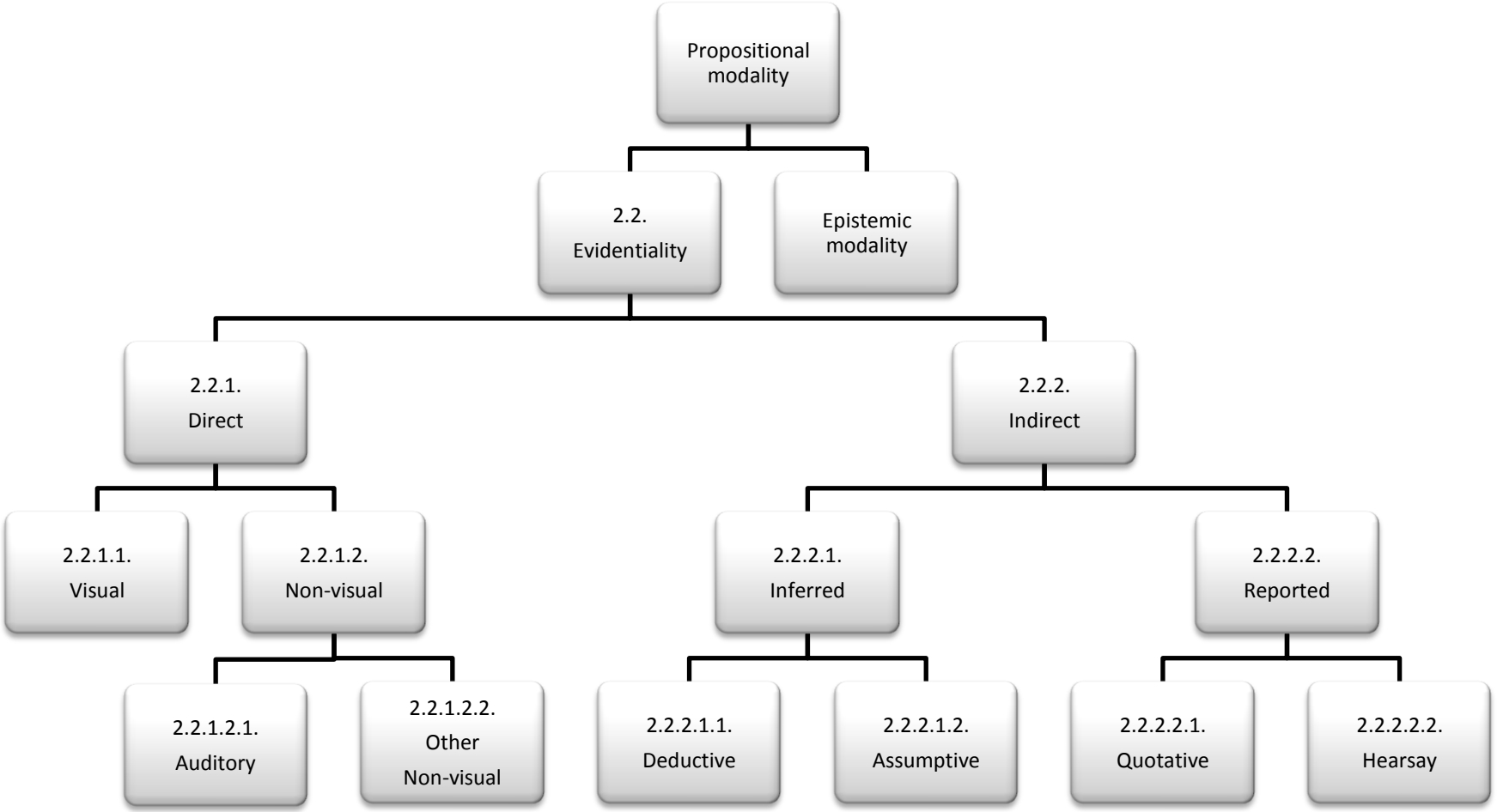
CHAPTER 2. EVIDENTIALITY AND ITS SUB-TYPES

Evidentiality, in its 'narrowest' sense, marks the source of information. As has been presented in the previous chapter, evidentiality is marked by various grammatical forms: in California Indian languages, for instance, evidentiality is highly grammaticalised and can be represented by verbal inflections or particles. Other languages, such as English or Polish, have no grammaticalised markers of evidentiality, therefore information source is presented lexically by modal verbs, adverbs, adjectives etc. Various grammatical markers used in a given language to represent evidentiality have different semantic meanings. Aikhenvald (2003: 11) proposes a narrow account of evidentiality, in which only grammaticalised inflections, particles etc. constitute 'proper' evidential markers. Therefore, for Aikhenvald "(t)he semantic 'core' of evidentials is source of information". However, she acknowledges the fact that "different systems tend to acquire various semantic extensions, e.g. 'epistemic' meanings", that is, a grammatical evidential marker that has a source of information (be it direct visual perception or hearsay) can have an epistemic overtone as an extended meaning added to the primary evidential one (2003: 11; quotations used by the author). The relationship between evidentiality and epistemic modality is an important issue, since both evidential and epistemic meanings can be found in European languages, for instance. The correlation between evidentiality and epistemic modality is discussed further later on in this work.

Despite various grammatical codings of evidentiality, it is useful to recognise main semantic sub-types of evidentiality. Palmer (2001), for instance, recognises two main sub-types of evidentiality: sensory and reported. Both sub-types can later on be sub-categorised into further types as found in many different languages. This chapter introduces various types of evidentiality and categorises them into different sub-types depending on the semantic meanings of particular markers used across languages, which are illustrated in Graph 1. Following subchapters are organised around the graph: each box in the graph has a chapter reference, for instance, 2.2.1. relates to a subchapter on direct evidentiality, which is split into two further subchapters, 2.2.1.1. on visual evidentiality and 2.2.1.2. on non-visual evidentiality.

Graph 1

Evidentiality and its sub-types



Before the classification is introduced, however, I briefly explain the relationship between evidentiality and epistemic modality, as evidentiality is often presented as a 'sub-type' of epistemic modality (see literature review in chapter 1.). Palmer (2001) recognises evidentiality as a sub-category of propositional modality, another sub-category being epistemic modality. Propositional modality is contrasted with event modality. Sub-chapter 2.1. below briefly describes what the difference between propositional and event modality is, and explains the relationship between epistemic modality and evidentiality as sub-categories of propositional modality.

2.1. EVIDENTIALITY AND PROPOSITIONAL MODALITY

Palmer (2001) makes a distinction between propositional and event modality. Event modality is primarily concerned with deontic and dynamic uses of modality, that is, uses relating to such notions as permission or obligation. Event modality does not pertain to the main topic of this thesis, therefore it is not analysed further. The later is "concerned with the speaker's attitude to the truth-value or factual status of the proposition" (2001: 8). The main difference between the event and propositional modalities for Palmer is that event modality deals with situation or events that have not yet taken place, are potential. Conversely, event modality is more concerned with the evaluation of the situation or event expressed in a sentence that has already happened.

Within propositional modality Palmer included both epistemic modality and evidential modality. The essential difference between epistemic and evidential modality for Palmer is that "with epistemic modality speakers make judgements about factual status of the proposition, whereas with evidential modality they indicate what is the evidence they have for it" (2001: 24). Epistemic modality, thus, is gradable in that the degree of commitment towards the proposition depends on the speaker's judgement of the situation or event described in the sentence: the truth of an utterance is evaluated on a scale of likelihood by the speaker. Palmer distinguished three types of epistemic modality: speculative, assumptive and deductive. Speculative epistemic modality expresses lack of certainty of what is being expressed, assumptive and deductive both are kinds of inference – with assumptive the inference is based on generally known facts, whereas with deductive the speaker bases his/her inference on the "observable

evidence" (2001: 24). Deductive and assumptive figure in both epistemic and evidential modalities as the epistemic judgement is based on some sort of evidence, either visual (deductive) or based on general knowledge or previous experience (assumptive) (Palmer 2001: 29).

Evidential modality, on the other hand, does not assess the factuality or truth of the sentence, it simply presents the source of information, that is, it asserts the evidence for the proposition. As has been mentioned in the first chapter, here are many different types of evidentials across languages. Palmer recognises two main types of, what he calls, "purely evidential categories" (2001: 35): reported and sensory evidentiality. Sensory evidentiality includes visual, auditory and other non-visual sensory evidence. Combinations of sensory markers depend on a given language, and so one language may have only one evidential marker used for all five senses (*-gara* in Ngiyambaa), whereas other languages have one marker for the sense of seeing and another to mark the remaining four non-visual senses (Tuyuca). Reported evidentiality, on the other hand, deals with non-sensory evidence obtained not through senses, but from other people or presents facts generally known. It includes such notions as 'hearsay', 'quotative' or 'deductive'. As with sensory evidentiality, languages use either one marker for different types of reported (non-sensory) evidence. One such language is mentioned above Ngiyambaa, which has only one morpheme (*-gara*) to account for all types of sensory evidentiality, and one morpheme (*-dhan*) to present 'linguistic', non-sensory evidence (Palmer 2001: 36). Fasu, on the other hand, has four different evidential markers to present non-sensory evidentiality: 'deduced from evidence', 'hearsay from a known source', 'hearsay from unknown source' and 'supposition' (2001: 38).

Palmer (2001) includes evidentiality within propositional modality alongside epistemic modality, as opposed to event modality, which deals with potential, future events. It is true that both sub-categories may share some meanings, like mentioned above deductive or assumptive. Both epistemic modality and evidentiality, modify the proposition, present the truth of the sentence from a different perspective. The crucial difference between the two is, however, that epistemic modality evaluates the truth of the proposition on a scale from being very probable to unlikely, while evidentiality simply presents the source of evidence. It is essential, therefore, to acknowledge the fact that

evidentiality is not a 'sub-type' of epistemic modality. It is a separate sub-category within the larger category of propositional modality.

Palmer's (1986, 2001) view is in contrast with Chafe's (1986) and Rooryck's (2001 a & b) 'wide' approach. The linguists analyse evidentiality as an integral part of epistemic modality, evidentials are understood as markers that "put in perspective or evaluate the truth value of a sentence both with respect to the source of information contained in the sentence, and with respect to the degree to which this truth can be verified or justified". Palmer's approach is also not in line with the 'narrow' accounts of evidentiality as presented by Aikhenvald (2001) or De Haan (2005), who analyse evidentiality as completely separate from epistemic modality, the linguists deny any relation between the two semantic categories. Palmer's account falls somewhere in the middle: evidentiality and epistemic modality are two different semantic concepts, the former one dealing with the source of evidence of the proposition, whereas the later one evaluates the factual status of the proposition. Both concepts fall under one category of propositional modality and may overlap.

The reminder of this chapter presents a categorisation of different types of evidentiality. Palmer's categorisation is a useful one as it recognises two main types of evidentiality, namely sensory and reported evidentiality. Palmer's sensory evidentiality is called below a direct evidentiality, though the two terms may be used interchangeably. Palmer's reported evidentiality is named an indirect evidentiality as it includes not only reported evidentials, but also other types of evidentiality (inferred, deductive, assumptive).

Semantic types of evidentiality presented in this chapter relate mostly to languages with a grammaticalised set of evidential markers, therefore languages like English and Polish are not analysed here.[2]

[2] The author thought it would be more useful to provide a more in-depth account of different types of semantic meanings of evidentiality in this chapter to set the background for the proper analysis of English and Polish in separate chapters later on in the thesis.

2.2. TYPES OF EVIDENTIALITY

This chapter presents types and sub-types of evidentiality. The most basic distinction is between direct and indirect evidentiality. Direct evidentiality pertains to sensory perception (visual, auditory, tactile, gustatory and olfactory), while the semantic category of indirect evidentiality includes all other types: inferred and reported evidentiality.

The meaning of evidential markers largely depends on the size of evidential system in a language: generally, the larger the system, the narrower the meaning of an evidential marker. Hence, direct evidentials in small systems may pertain to any type of sensory perception, in larger systems, the markers have a more 'limited' meaning of only visual, or auditory perception. Similarly, indirect evidentials in smaller systems may be used to mean anything from deductive to hearsay, in larger systems, the evidentials become more 'limited' in their senses and one evidential may have a meaning of only deductive or quotative.

The remainder of this chapter is organised as follows: first direct evidentiality and its subtypes is described (visual, auditory and other types of sensory perception), later, indirect evidentiality with its sub-categories is analysed: inferred evidentiality (with its two subtypes: deductive and assumptive) and reported evidentiality (quotative and hearsay).

2.2.1. DIRECT EVIDENTIALITY

Direct evidentiality usually relates to visual evidence, however it often includes any type of sensory evidence, that is, evidence obtained through senses: seeing, hearing, touch, smell or feeling. The evidence is obtained first-hand, personally by the speaker. Depending on a system used in a given language, there may be only one direct evidential to account for any type of sensory evidence, like in Ngiyambaa in which one evidential marker *–gara* is used to present any kind of sensory evidence.

Examples below illustrate the use of the marker *–gara* in different meanings (Aikhenvald 2004: 34-35; after Donaldson 1980: 275-8). Sentence (2.1) shows the use of *–gara* for direct visual evidence:

(2.1) ŋindu-gara girambiyi
you+NOM-SENS.EV sick+PAST
'You were sick'

In the above sentence *–gara* is used for visual evidence, the speaker saw that the person referred to was sick. Below is the same marker used in a sentence with auditory meaning:

(2.2) gabuga:-gara=lu ŋamumiyi
egg+ABS-SENS.EV=3ERG lay+PAST
'It's laid an egg'

Here, the speaker heard the situation happen, therefore *–gara* is used as an auditory evidential. Sentence (2.3) presents evidence obtained via the sense of taste:

(2.3) dhagun-gir-gara ŋina dhiŋga: ga-ɽa
earth-NASTY.WITH-SENS.EV this+ABS meat+ABS be+PRES
'This meat tastes nasty with earth'

The speaker has tasted the meat and, based on the direct experience, concluded that it tastes of earth. Example (2.4) illustrates the use of *–gara* to present evidence acquired through the sense of smell:

(2.4) wara:y-gara=dhu=na bungiyamiyi
Bad+ABS-SENS.EV=1IM.NOM=3ABS change.with.fire+PAST
dhiŋga:=dhi:
meat+ABS=1OBL
'I have burnt my meat, so it's no good'

Here, the speaker again has a personal physical evidence for the use of *–gara* as a direct evidential – this time he/she smells the meat burnt and concludes it is no good. Sentence (2.5) is a final example from Ngiyambaa. Here *–gara* is used to illustrate evidence based on physical touch.

(2.5) yura:bad-gara ŋidji guɽuga-nha
rabbit+ABS-SENS.EV here+CIRC be.inside-PRES
ŋama-ɽa-baɽa=dhu=na
feel-PRES-CATEG.ASSERT=1NOM=3ABS
'The rabbit is in here, I feel it for sure'

The speaker of (2.5) feels the rabbit in its burrow, again has direct physical evidence for the use of direct evidential morpheme *–gara*.

The five examples from Ngiyambaa above demonstrate that the same morpheme can be used to indicate five different types of physical evidential meaning. Which meaning exactly is intended by the speaker can be inferred based on the context of a sentence. It is relatively easy to establish which meaning was intended in sentence (2.5) thanks to the lexical reinforcement ('I feel it for sure'). Other uses are context-specific.

2.2.1.1. Visual evidentials

Visual evidentials are used for events that have been seen (personally witnessed) by the speaker. This evidential is used in larger systems, where there usually is a separate marker to denote evidence obtained through other senses (touch, hearing, smell and feeling).

Eastern Pomo is an example of a language with a visual evidential morpheme and a separate non-visual morpheme to denote other types of sensory evidence. Example (2.6) below from Tucano, the marker *–ámi* is used to denote visual evidence (Aikhenvald 2004: 52):

(2.6) diây̷ wa'î-re yaha-ámi
dog fish-TOP.NON.A/S steal-REC.P.VIS.3SGNF
'The dog stole the fish'

Here, the speaker saw the dog steal the fish, the speaker has seen the event happen, therefore the use of the visual evidential is fully sanctioned.

Tariana also has a separate direct marker to denote visual evidence. In sentence (2.7) morpheme *–na* is used to denote sensory, visual perception, as opposed to *–mhana*, which is used as a non-visual evidential (Aikhenvald 2004: 167):

(2.7) ne:ri halite ma-ka-kade-mhana nu-yã-ka
deer white+NCL:ANIM NEG-see-NEG-REM.P.NONVIS 1SG-stay-DECL
nuha ne:ri irite-mia-na nu-ka
I deer red+NCL:ANIM-ONLY-REM.P.VIS 1SG-see
nu-yã-ka nuha
1SG-stay-DECL I
'I have never seen a white deer, I have only seen red deer'

The speaker in (2.7) has never seen white deer, therefore a past non-visual evidential *–mhana* is used. He/she has seen red deer, however, therefore a visual marker *–na* is used.

Visual evidentials may be used not only for actions that the speaker has witnessed personally, it may also cover situations such as "observable facts" (Aikhenvald 2004: 167) or when pointing to a picture, for instance. Sentence (2.8) from Tariana exemplifies the use of present visual evidential *–naka* to denote an "observable fact":

(2.8) Kaymaka hĩ-tuki-naka nu-dana pi-na.
thus DEM:ANIM-DIM-PRES.VIS 1SG-write 2SG-OBJ.
Waha aĩ-se-nuku matʃa-naka thuya.
We here-LOC-TOP.NON.A/S be.well-PRES.VIS all.
'So I am writing this little bit to you. We here are all well.'

Example (2.8) is taken from a letter, the writer tells what he is doing and that everyone is well. The present visual evidential is used to described actions happening at the moment of writing as well as the general state of wellbeing. Sentence (2.9), on the other hand, illustrates the use of present visual evidential in Tariana to refer to objects recognized in the picture:

(2.9) Yɨ'î makɨ nii-mi
I son be-PRES.VIS.3SG.MASC
'This is my son'

In (2.9) the person uses the present visual evidential to say that his/her son is in the photo.

2.2.1.2. Non-visual evidentials

Non-visual evidentials cover sensory evidentials other than sight, that is, a non-visual evidential denotes that the speaker's evidence is derived from a personal experience of hearing, smell, feeling or taste. In languages with smaller evidential systems, the same evidential marker is used to denote any type of non-visual sensory experience. Example (2.10) below is taken from Tariana, evidential marker *–mha* here is used to say that the evidence is obtained through hearing (Aikhenvald: 2004:168-171):

(2.10) patʃi-mha wa-pumi na-nu
someone-PRES.NONVIS 1PL-after 3PL-come
'Someone is coming after us'

This sentence was said by a girl, she could not see the person following her, therefore she used the non-visual evidential. The same evidential is used in (2.11) below when the speaker has felt something happen to her:

(2.11) paita-mha nuha-naku yarumakasi
one+NUM.CL:ANIM-PRES.NONVIS I-TOP.NON.A/S dress
di-phua-liphe
3SGNF-step-FIRMLY
'Someone has stepped on my dress and is holding it firmly'

The speaker of the above sentence can feel that her dress is held firmly by someone else, she cannot see who has stepped on her dress though, so the present non-visual evidential is used. (2.12), on the other hand, presents the use of *–mha* to denote the sense of smell:

(2.12) aĩ-nuku iri puisani-pu-mha
here-TOP.NON.A/S blood smell.of.flesh-AUG-PRES.NONVIS
'There is a very strong smell of blood here'

The above sentence was uttered by an evil spirit smelling blood. The smell of blood is the only evidence that the speaker has, there is no visual evidence at hand, therefore non-visual sensory evidential marker is used again.

Non-visual sensory evidentials are used not only for evidence obtained via senses other than sight, they may also be used to describe physical or emotional states. (2.13) below, also from Tariana, illustrates the use of non-visual marker *–mha* to describe a physical state:

(2.13) adaki di-nu-mha nu-na
fever 3SGNF-come-PRES.NONVIS 1SG-OBJ
'I have fever (lit. fever comes to me)'

The speaker can feel the fever coming, to describe the state of becoming ill he/she uses a non-visual evidential. The same evidential morpheme is used to talk about somebody's preferences:

(2.14) uni kada-peri hui-mha nuha
water black-NCL:COLLECTIVE like.food-PRES-NONVIS I
'I like coffee (lit. black water)'

In (2.14), the present non-visual evidential morpheme *–mha* is used with a verb of liking, to express the speaker's internal sense of liking, as opposed to (2.15), where the non-visual morpheme is used for a situation beyond the speaker's control:

(2.15) wa-pika-mhana wha awokada-se
1PL-get.lost-REM.P.NONVIS we jungle-LOC
'We got lost in the jungle'

In the above sentence, the speaker explains a situation he/she had no control over, they couldn't help getting lost in the jungle, the past non-visual *–mhana* is used here to describe uncontrollable actions.

Sentence (2.16) from Tucano illustrates the use of non-visual evidential to express the speaker's emotional state:

(2.16) koô etâ-kǎ yɨ'î e'katí-asɨ
she arrive-SUB I be.happy-REC.P.NONVIS.NONTHIRD.P
'When she arrived I felt happy'

The past non-visual sensory evidential *-asɨ* is used to say that the speaker was happy because of something, here, again, internal feelings are expressed via a non-visual evidential. Similarly, in (2.17) from Eastern Pomo, evidential marker *–nk'e* is used to express internal state of 'being afraid':

(2.17) k^héŝ k^hú·lma-nk'e
lots afraid-NONVIS
'I am afraid (of the dark)'

The above example illustrates the use of non-visual evidential to say that the speaker is afraid of the dark.

2.2.1.2.1. Auditory evidentials

Larger evidential systems may have a separate evidential marker to express auditory evidence. One such language is Koasati, where morpheme *–ha* functions as an auditory evidential (Da Haan 2003: 315; after Kimball 1991: 207):

(2.18) nipó-k aksóhka-ha
meat-SUBJ char-AUD
'It sounds like the meat is charring.'

In sentence (2.18) the speaker has perceived the action of charring the meat by hearing.

Auditory evidentials, however, are very rare across languages. Usually, the sense of hearing is expressed by a non-visual sensory evidential, and the meaning can be inferred from context.

2.2.1.2.2. Other non-visual evidentials

Sensory evidence other than seeing and hearing is not normally expressed by separate evidential markers. Depending on how large the evidential system is, languages use a general -direct evidential to express all types of sensory evidence, or a non-visual evidential for all sensory meanings other apart from sight (provided that a language has a separate visual marker).

2.2.2. INDIRECT EVIDENTIALITY

Indirect evidentials, contrary to direct ones, are used when the speaker did not witness (see, hear etc.) the action or event, but found out about the event after it has happened. Generally, direct evidentials describe personal experience: the speaker expresses evidence perceived by his/her senses. With indirect evidentials, the situation is a bit more complex. There are two broad types of indirect evidentials: inferred and reported. With inferred evidentials, the speaker concludes that the event or situation took place based on either evidence or logical inference. With the second type, reported evidentials, the speaker has learnt about the event from someone else. The distinction among the three different types of evidentials is illustrated by examples (2.19) - (2.22) below.

Tucano uses different evidentials for different sources of evidence. The same proposition 'The dog stole the fish' is altered by the use of different evidential suffixes. In (2.19) below a visual evidential *-ámi* is used (Aikhenvald 2004: 52):

(2.19) diâyɨ wa'î-re yaha-ámi
dog fish-TOP.NON.A/S steal-REC.P.VIS.3SGNF
'The dog stole the fish'

The speaker of (2.19) saw the dog steal the fish, therefore a past visual evidential is used, as opposed to example (2.20) where a past non-visual marker *–ásĩ* is used:

(2.20) diâyɨ wa'î-re yaha-ásĩ
dog fish-TOP.NON.A/S steal-REC.P.NONVIS.3SGNF
'The dog stole the fish'

The speaker of the above sentence could not have seen what happened, however he/she must have heard the commotion and therefore the sentence is construed with the use of non-visual evidential to imply that the evidence comes from personal experience, as with the use of a visual in (2.19) above. In sentences (2.21) and (2.22) below the speaker cannot use any of the sensory evidentials as the event has not been witnessed personally. In (2.21) an inferred evidential *–ápĩ* is used:

(2.21) diâyɨ wa'î-re yaha-ápĩ
dog fish-TOP.NON.A/S steal-REC.P.INFR.3SGNF
'The dog stole the fish'

Here, the speaker has probably just seen the 'aftermath' of the situation, the resultant state, and inferred that the fish must have been stolen by the dog. Conversely, in (2.22), there is no physical evidence present for the event, the speaker was told what happened by someone else:

(2.22) diâyɨ wa'î-re yaha-ápɨ'
dog fish-TOP.NON.A/S steal-REC.P.REP.3SGNF
'The dog stole the fish'

In the above example a reported evidential suffix *-ápɨ'* is used to imply that the speaker has learnt about the event from a third party and did not participate in the witnessing of the event in any way.

2.2.2.1. Inferred evidentials

Inferred evidentials typically imply that the event has been inferred based on personal sensory evidence of the resultant state of the event (deductive), or inference based on knowledge or experience (assumptive). Smaller evidential systems typically use inferred evidentials in their deductive sense, that is, to cover speaker's deduction based on the sensory perception of the end result of an event or situation. The deduction can be based on visual evidence as in (2.23) from Bora below (Aikhenvald 2004: 163-4; after Weber and Thiesen forthcoming):

(2.23)	ó	áxʈh^{h}ɯmɨ-ʔ	ts^{h}à-há-ʔha^{H}-a^{L}	hà:
	I	see-(t)	that-(shelter)-INFR-REMOTE.PAST	shelter
	aíŋ-:ɓɛ-hà			
	burn-sIn-(shelter)			
	'I saw a burned house'			

The house burnt before the speaker saw it, he/she saw only the remnants of the burnt house, hence, on the basis of this visual evidence, the inferred evidential *-ʔha* is used.

The evidence can, however, come from other sensory sources than sight, such as hearing in the example below from Qiang (LaPolla 2003: 66):

(2.24)	mi	ʐbə	ʐete-k
	person	drum	beat-INFR
	'Someone is playing drums'		

The person saying the above sentence did not see anyone play the drums, he/she only heard the noise, and based on that concluded that someone must be playing drums – hence the use of inferential suffix *–k*.

In larger evidential systems, the inferred evidentials may convey other meanings as well, not only based on deduction from sensory evidence. This may be assumption based on reasoning as in (2.25) from Wanka Quechua (Aikhenvald 2004: 165; after Floyd 1999: 104):

(2.25)	chay	lika-a-nii	juk-ta-chra-a	lika-la
	that	see-NOMN-1PL	other-ACC-INFR-TOP	see-PAST
	'The witness (lit. my see-er) must have seen someone else'			

The inferred evidential *–chra* above refers to the psychological state of someone else than the speaker. The situation leading to the above conclusion is as follows: a woman, whose house was robbed, says that her neighbour was the thief, because she was told that the man had been working near her house earlier that day; her neighbour does not admit the accusation. The speaker's path of reasoning is that if the robbed woman's neighbour denies being the thief, the woman must have obviously seen someone else.

2.2.2.1.1. Deductive evidentials

With deductive evidentials the inference is based on circumstantial sensory evidence: the speaker has got physical (visual or other sensory) evidence of what has happened. The event however has not been witnessed as a whole, the deduction is based on the results only (Palmer 2001, Aikhenvald 2004).

Sentence (2.26) comes from Wintu, which distinguishes between deductive evidential marker *–re* and assumptive *-ʔel* (Schlichter 1986: 52):

(2.26)	Ničay	ʔewin	suke-re
	Nephew	here	stand-DEDC
	'My nephew must have been here (I see tracks)'		

Visible evidence leads the speaker of the above sentence to conclude that his/her nephew must have been there. The deduction is based on physical evidence, similarly to the next sentence from Mamainde (Kroeker 2001: 63):

(2.27) wa^{3}kon^{3}-Ø-nû^{2}hê^{3}-la^{2}
work-3SG-DEDC.PAST-PERF
'He worked (yesterday)'

The speaker of the above sentence uses the inferred deductive evidential *-nû^{2}*: that means that he/she knows that 'He worked' on the basis of some visual evidence that lead to such a conclusion. Tuyuca also differentiates between two types of inferred evidentials. Example (2.28) below shows the use of *–yi* as a deductive marker (Barnes 1984: 257):

(2.28) díiga apé-yi
soccer play-3SG+PAST-DEDC
'He played soccer'

Again, the speaker has not seen him play soccer, the speaker has, however, got some sort of visual evidence, for instance his shoe prints on the field.

2.2.2.1.2. Assumptive evidentials

Assumptive evidentials, as opposed to deductive, are not based on sensory evidence, the inference is based on reasoning: the speaker assumes something has happened because he/she has had similar experience in the past, the situation is quite commonplace, follows a regular pattern, or is based on general knowledge (Palmer 2001, Aikhenvald 2004).

Sentence (2.29) below is taken from Wintu, which has two types of inferred evidentials: deductive (as in (2.26)) and assumptive (Schlichter 1986: 52):

(2.29) ʔImto·n nuqa·ʔel
berries ripe-ASSM
'Berries must be ripe'

The assumptive inferred evidential *-ʔel* indicates that the speaker assumes the sentence must be true basing his/her deduction on experience: this is the time of year when

berries are usually ripe. General knowledge makes the speaker of the next sentence from Mamainde assume that what is being said is true as well (Kroeker 2001: 63):

(2.30) ti^{3}ka^{3}l-a^{2} kai^{3}l-a^{2} yain-Ø-te^{2}ju^{2}hê^{3}-la^{2}
anteater-DEF ant-DEF eat-3SG-ASSM-PERF
'The anteater habitually eats ants'

The assumption in (2.30) is based on general knowledge: the fact that it always happens that way is enough evidence for the speaker to assume that the same situation will occur again. Tuyuca also has a separate assumptive evidential *–hĩyi* (Barnes 1984: 257):

(2.31) díiga apé-hĩyi
soccer play-3SG+PAST-ASSM
'He played soccer'

Here the assumptive evidential indicates that the assumption, again, is based on reasoning rather than sensory evidence – it is reasonable to infer that he played soccer.

2.2.2.2. Reported evidentials

Reported evidentials generally denote that the information presented in a sentence has been obtained from someone else, not personally as was the case with direct evidentials. The exact source of the information (who it was obtained from) may or may not be indicated. Languages with smaller evidential systems use reported evidentials to indicate any type of information not obtained personally, but rather quoted by someone else or obtained through hearsay, rumour (Aikhenvald 2001).

An example of a language which has one evidential marker to denote any kind of reported evidence is Cayuga. In (2.32) below *–akę'* is used as a reported evidential (Mithun 1986: 102):

(2.32) akonǫhayá'k akę'
she-got-hurt they-say
'I heard she got hurt'

In the above sentence, the exact source of information has not been specified. The use of a reported evidential implies that the information has not been personally witnessed, the speaker has learnt about the situation through report, it is not clear, however, if the information has been told by a specific person, or the speaker knows about it through rumour. Similar situation can be observed in Tucano. (2.33) below illustrates the use of *–apo'* to indicate information acquired through report without indicating specific authorship:

(2.33) utî-apo'
cry-REC.P.REP.3SG.FEM
'She cried (it is said)'

It is not clear if the speaker of the above sentence knows that 'she cried' because 'she' told him/her herself, or the speaker found out about it from a third party. Such vagueness may be eliminated by lexical reinforcement, that is, by adding specifically who the information was obtained from. Lezgian uses evidential suffix *–lda* to indicate reported information. Sentence (2.34) does not specify the author of the information (Aikhenvald 2004: 31-2; after Haspelmath 1993: 148):

(2.34) Baku.d-a irid itim güle.di.z aqud-na-lda
Baku-INESS seven man bullet-DAT take.out-AOR-REP
'They say that in Baku seven men were shot'

The information presented in the above sentence comes from hearsay. The same evidential is used in (2.35) below. Contrary to (2.34), the example below explicitly states who the author of the original statement was:

(2.35) Gzaf ĉir xu-n, aq'ullu insan-r.i
much know ANTIC-MSD smart person-PL(ERG)
luhu-zwa-j-wal, zarar ja-lda
say-IMPF-PART-MAN harm COP-REP
'As smart people say, knowing too much is harmful'

Here the statement 'knowing too much is harmful' with the use of reported evidential –*lda* is lexically reinforced by adding 'as smart people say'.

Reported evidentials may also be used in a story, such as evidential particle *kwele* in Mparntwe Arrernte below (Aikhenvald 2004: 33; after Wilkins 1989: 392):

(2.36) Pmere arrule-rle kwele ne-ke; artwe nyente…
camp long-ago REP be-PC; man one
'A long time ago, so they (the ancestors) say, there lived a man…'

The story referred to in (2.36) is passed from generation to generation, the evidential marker here is used in telling stories. Sentence below from Seneca illustrates the use of reported evidential *kyǫ'ǭ* in a narrative as well (Mithun 1986: 103):

(2.37) Sǫká:' kyǫ'ǭ te:niksa'á: hotiya'tahtǫ'ǭ sǫ:te'.
someone REP two-children they-are-lost last-night
Berrino kyǫ'ǭ hiya:sǫh. Chickchick
Berrino (name) REP their-names Chickchick (name)
kyǫ'ǭ koksa'ta'shǭ'ǫh.
REP her-children
'I heard that two kids were lost last night. Berrino I guess their names were. Must be Chickchick's children.'

Here the story is told in an every-day conversation, contrary to (2.36) which was part of a folk story repeated across generations.

Languages with more complex evidential systems may have more than one reported evidential, usually two. The two different types of evidentials are hearsay (to

indicate that the information was obtained from an unknown source, or the source of the information is not provided) and quotative (the original author is clearly stated)[3]. Northern Embera is an example of a language that has two reported evidentials: *-mana* used to indicate that the information comes from unknown source ('general' hearsay) or folklore, and *–pida* used as a quotative, to indicate that the speaker repeats exactly what someone else have said.

The difference between two reported evidentials in languages with larger systems may be different from a straightforward hearsay for unknown author and quotative for a specific source. Southeastern Tepehuan has two reported evidentials: *sap* used for report of information either from a known source or general hearsay, or "in folklore, with an implication that the story comes from a reliable source" (Aikhenvald 2004: 58; after Willet 1991 161-6):

(2.38) Oidya-'-ap gu-m tat. Jimi-a'
go.with-FUT-2SG ART-2SG father go-FUT
sap para Vódamtam cavaimuc.
REP1 to Mezquital tomorrow
'(You should) accompany your father. He says he's going to Mezquital tomorrow.'

In the above example the source of information is stated: the father said he was going to Mezquital. Similarly in (2.39) below, we know who said the original sentence:

[3] Reported evidentials themselves are referred to by various terms by different authors (second-hand, hearsay, quotative, linguistic evidence). It is even more complicated once the sub-types of reported evidentials are being analysed. Willet (1988) recognises three sub-types: second-hand evidentials (when speaker knows about an event from a direct witness), third-hand evidentials (information not from a direct witness) and folklore (for situations described as part of folklore). Palmer (2001) names the three sub-types Reported (2), Reported (3) and Reported (Gen), while Aikhenvald (2004) refers to the 'reported' evidential in a more general sense (for languages with only one reported evidential meaning, either hearsay or quotative) and in the narrower one (to indicate report without stating the authorship, hearsay).

(2.39) Va-jɨ pir gu-m bí. Na-p sac
REL-get.cold ART-2SG food SUB-2SG REP2
tu-jagui-a'
EXT-eat-FUT
'Your food is already cold. (You said) you were going to eat.'

Both reported evidentials in (2.38) and (2.39) are used with a specific source of information. The particle *sac* above is used as a 'reminder': the hearer already knows part of the story.

2.2.2.2.1. Hearsay evidentials

Hearsay evidentials do not specify the authorship of the statement. The speaker may have heard about the event or situation from someone who was not a direct witness, it may be part of a story or a folk story (Aikhenvald 2004). Fasu is an example of a language with two reported evidentials *–pakae* (example below) used when the speaker does not know the author of the original sentence and *–ripo* when the source is known by the speaker (Palmer 2001: 41; after Loeweke and May 1980):

(2.40) pe-sa-pakae
come-PAST-HEAR
'(I've heard) it's coming'

The above sentence comes from an unknown source, the speaker repeats what he/she heard without indicating where the information comes from. Comanche, on the other hand, has a 'past narrative' evidential marker *kɨ* (Charney 1993: 188):

(2.41) sitɨ$^{=}$-ki-se nɨHka-hu$^{=}_{(2)}$-tuʔi
these.ones-HEAR-CNTR dance-INTN:ASP-UR:ASP
'They were going to dance'

The evidential *kɨ* in the above sentence is used when a speaker has no direct knowledge of the situation or event: the speaker simply heard the story from others, or it may be part of folklore.

2.2.2.2.2. Quotative evidentials

The crucial difference between hearsay and quotative evidentials in language systems including two reported markers is that, contrary to hearsay, quotatives specifically indicate the author of the original statement. Fasu, mentioned above, has a separate quotative evidential marker *–ripo* (Palmer 2001: 41; after Loeweke and May 1980):

(2.42) pe-sa-ripo
come-PAST-QUOT
'(I've heard) it's coming'

The above sentence means that the spear knows exactly who the information comes from, even if the source is not clearly indicated in the sentence. Quotative *me* in Comanche is used with direct quotations (Charney 1993: 188):

(2.43) "hãã" mese sutɨ̄ patsi
yes QUOT_CNTR that.one older.sister
'The older sister said "Yes"'

The above sentence uses a quotative marker to state exactly who the information comes from (the older sister). It is used with quotation marks.

2.2.3. TYPES OF EVIDENTIALITY - CONCLUSIONS

Languages vary in terms of evidentiality systems, small systems may differentiate as few as only two types of evidential morphemes. In such systems one evidential may be used to mark any type of direct perception (visual, auditory, etc.), the other one is used for any other type of evidence (inference, report, etc.). In larger systems, the meaning of

evidential markers becomes narrower, more 'specialised', so that one evidential marker is used only to mean hearsay or visual perception, for instance.

Two-term evidential systems distinguish between direct (firsthand) and indirect (non-firsthand) evidence only. In the case of such languages, direct evidential marker is used to denote any type of physical sensory evidence, to indicate that the evidence was obtained by the speaker himself/herself, the speaker has participated in the event. This is often opposed to indirect, non-sensory evidentials, where the speaker knows about the event from someone else, he/she has no personal involvement in the action.

Languages with more than two choices of evidentiality can have separate evidential markers to express individual meanings. Most languages that have visual and non-visual sensory evidentials, the visual evidential is reserved only for evidence seen, whilst the non-visual one is used for any sensation apart from seeing: hearing, feeling, smell or taste. The basic meaning of non-visual evidentials, however may be extended to express the speaker's physical or emotional state, or (dis)likes. It may even be used for external circumstances beyond the speaker's control. However, there are languages which have a separate auditory evidential. The organisation of direct sensory evidential markers depends on how big a given language system is.

In larger systems, there may be more than one indirect evidential to account for different senses: languages may differentiate between inferred and reported evidentials. Inferred evidentials may cover the meanings of inference from result witnessed personally by the speaker (deductive evidentiality), and assumption on the basis of reasoning, experience or knowledge (assumptive evidentiality), or a language may have separate markers to indicate deduction and assumption. Evidential systems that differentiate between the two types of inferred evidentials are not common, some of the languages that have separate markers to indicate deductive and assumptive evidence are Witnu, Tuyuca or Mamainde (Northern Nambiquara) (Palmer 2001, Aikhenvald 2004).

A language may have only one reported evidential to cover all meaning. In that case reported evidential markers indicate that the speaker obtained the evidence for what he/she is saying from a third party, this can be a concrete person, or a rumour, or a folk story. Larger languages differentiate between quotative evidentials (speaker gives the source of evidence) and hearsay evidentials (no indication of the source of information).

Evidentiality, as presented in this chapter, is defined as a distinct grammatical and semantic category (like tense or number). Grammatical coding of evidentiality depends on a language and may be either a verbal paradigm or a set of independent particles (Aikhenvald 2004). As demonstrated, the meaning of evidentials largely depends on a size of an evidential system in a given language. Therefore, it is so difficult to describe evidential meanings encoded in a given evidential marker. This is also the reason why linguists differ in the number and types of evidentials they recognise as they base their analysis on a language being described. It should also be borne in mind that the same evidential marker may be named differently by various linguists. This chapter organises semantic meanings of evidentials occurring in various languages based on currently available literature and categorises them into different types and sub-types. The pattern presented here (Graph 1) is followed in subsequent chapters when the semantic meanings of lexical items with evidential meaning occurring in English and Polish are described.

CHAPTER 3. EVIDENTIALITY IN ENGLISH

Many languages described by Aikhenvald (like California Indian languages) have an obligatory system of evidentials: not using a morpheme or particle to mark information source in a sentence would sound awkward and be ungrammatical. English, by contrast, does not have a mandatory set of grammaticalised evidential markers. Evidentiality in English is not a part of a morphosyntactic system, it is realised lexically: via verbs, adjectives, adverbs, parentheticals etc. English has a large variety of lexical items to present evidential meanings. Direct evidentiality is presented with a set of verbs of perception: *see, hear, feel, smell, taste*, as well as *look, watch* or *listen*. Indirect evidentiality may be presented by verbs of reporting (*say, tell*). Indirect evidentiality may also be presented in English with the use of perception verbs such as *see* or *hear*.

This chapter presents a synchronic analysis of evidentiality in English. It is not possible to present every single word or expression that has an evidential meaning, only the most common (as presented in literature and chosen by the author) lexical items are discussed. Therefore, perception verbs, as verbs pertaining to sensory evidentiality with extensions to deductive and reported senses in English, are discussed first and at length in chapter 3.1. Firstly, three different types of English perception verbs are presented in 3.1.1. Chapter 3.1.2. analyses how different subject and complements of the perception verbs influence evidential meaning.

Chapter 3.2. presents other ways of referring to the source of evidence. 3.2.1. is devoted to the discussion of *seem* and *appear*. As highly polysemous verbs, they can refer to different types of evidentiality (similarly to perception verbs), therefore, they are presented in a separate chapter. 3.2.2. shows what other lexical items are used to illustrate inferred evidentiality (modal verbs, adverbs), while 3.2.3. is devoted to the analysis of other ways of expressing reported evidentiality in English (reported speech, hearsay adverbs).

The relationship between evidentiality type indicated by a given lexeme or phrase and grammatical categories such as tense, aspect, person etc. are mentioned in this chapter only when the change of tense, for instance, influences the type of evidentiality. Similarly, the relationship between evidentiality and other semantic categories (such as

epistemic modality) is not discussed here in this chapter. The relation between evidentiality and other grammatical and semantic categories is discussed in chapter 5.

3.1. ENGLISH PERCEPTION VERBS

English uses perception verbs to present sensory evidence: sight, hearing, touch, taste and smell. These verbs are used mainly to indicate that the speaker has direct sensory perception of the event or situation (visual, auditory, tactile, gustatory and olfactory). Verbs to indicate visual and auditory perception mostly pertain to the analysis of evidentiality and are most often analysed in the literature. These verbs, however, can also indicate inferred or reported evidentiality.

English perception verbs constitute a large set of verbs that can be arranged into three different types. The different types of perception verbs and the evidential meaning that they carry are presented in 3.1.1. The meaning of perception verbs is determined by their argument structure (mostly the person of the subject) and types of complements. These issues are discussed in 3.1.2. with focus on how the evidential meaning shifts depending on the changes in the sentence structure. 3.1.3. summarises the analysis of perception verbs, with reference to evidentiality in particular.

3.1.1. TYPES OF PERCEPTION VERBS IN ENGLISH VERSUS TYPES OF EVIDENTIALITY

Perception verbs in English are polysemous depending on the function of the subject[4]: the subject can have the role of a perceiver (experiencer of the event) or percept (the object perceived). The verbs can also describe activity (dynamic verbs) or state (stative verbs). Dynamic perception verbs can only have a perceiver as the subject, whereas stative verbs

[4] Viberg (1984) differentiates three groups of meanings of perception verbs: activity (3.1), experience (relating to senses in (3.2), and copulative (3.3). Whitt (2008) analyses the senses as subject-oriented agentive verbs (corresponding to Viberg's activity), subject-oriented experiencer verbs (Viberg's experience), and object-oriented perception verbs (copulative). Gisborne (2010) devides perception verbs into trhee classes: LISTEN-class (agentive) verb (3.1), HEAR-class (experiencer verbs (3.2), and SOUND-class (percept) verbs (3.3).

occur either with subject-perceiver or subject-percept. Below different types of perception verbs are presented.

The subject of sentences in (3.1) functions as a perceiver (examples from Viberg 1984: 125):

(3.1) a. Peter looked at the birds.
b. Peter listened to the birds.
c. Peter felt the cloth.
d. Peter tasted the food.
e. Peter smelled the cigar.

The above sentences also have perceiver in the subject position. The process described here is dynamic. The difference between stative and dynamic sense of perception verbs is explained by Viberg (1984: 123; italics used by the author): "(*a*)*ctivity* refers to an unbounded process that is consciously controlled by a human agent, whereas *experience* refers to a state (or inchoative achievement) that is not controlled". Examples with stative perception verbs are presented in (3.2) below:

(3.2) a. Peter saw the birds.
b. Peter heard the birds.
c. Peter felt a stone under his foot.
d. Peter tasted garlic in the food.
e. Peter smelled cigars in the room.

All sentences refer to a state, an 'involuntary' experience of the perceiver (subject). The perceiver has no control over the events described.

The last group of sentences that presents the use of perception verbs in a stative sense as well:

(3.3) a. Peter looked happy.
b. Peter sounded happy.
c. The cloth felt soft.

d. The food tasted of garlic.

e. Peter smelled of cigars.

Contrary to examples in (3.2), the sentences above have an object of perception (percept) in the subject position rather than the perceiver. Sentences in (3.2) and (3.3) have stative verbs, while examples in (3.1) illustrate dynamic senses of the perception verbs. The difference between sentences in (3.2) and (3.3) lies in the argument structure of the verbs. In (3.2) the subject is the perceiver (experiencer), the object perceived (percept) is the direct object. In (3.3) the subject is not the perceiver, but the object of the perception, the perceiver is not mentioned at all.

Different perception verbs presented in examples (3.1) – (3.3) are summarised in the table below:

Table 1: English perception verbs.

Type of sensory perception	**Types of verbs**		
	Dynamic (activity)	**Stative (subject-perceiver)**	**Stative (subject-percept)**
	Example (3.1)	Example (3.2)	Example (3.3)
SIGHT	*look*	*see*	*look*
HEARING	*listen*	*hear*	*sound*
TOUCH	*feel*	*feel*	*feel*
TASTE	*taste*	*taste*	*taste*
SMELL	*smell*	*smell*	*smell*

As can be seen from the table, visual and auditory perception have different lexemes as representations of different meanings. Tactile, gustatory and olfactory perception, on the other hand, have the same lexemes to express the three different senses. Only sentences in (3.2) and (3.3) with stative verbs can be used in evidential senses as they give reference to the source of evidence. In the case of sentences in (3.2) the subject is the perceiver, while in (3.3) the percept is the more salient entity in the sentence, the perceiver is not mentioned at all. Sentences in (3.2) can be used only as an example of reported evidentiality: the speaker has no direct evidence, he/she knows about the events described in the sentences only from someone else. Examples a. and b. from (3.3) can also be used only in indirect sense, here, however, the speaker may have found out about the events described from a different person (in which case they are analysed as an instance of quotative evidentiality), or the event might have been inferred

based on appropriate sensory evidence (deductive evidentiality). Examples (3.3) c. – e. can also be understood as an instance of indirect evidentiality: the speaker simply quotes what was reported to him/her by someone else. These sentences, however, may also be analysed in terms of direct evidentiality: the sentences are realisations of past direct sensory evidence of the speaker.

3.1.2. ARGUMENT STRUCTURE AND COMPLEMENTATION PATTERNS OF ENGLISH PERCEPTION VERBS AND EVIDENTIALITY TYPES

English perception verbs have different senses relating to stative and dynamic meanings and depending on the function of the subject of a sentence, as shown in examples (3.1) – (3.3). Perception verbs are polysemous in that verbs of each type (subject-percept, subject-perceiver) express different evidential meanings in English: they are used to express direct sensory evidentiality, inference or quotative evidentiality. The meaning encoded in a particular verb depends on the argument structure and complementation patterns. First, differences depending on the person of the subject are presented. Later in the chapter, various types of complements are discussed with the aim on illustrating the correlation between complementation patterns and evidential reading of the perception verbs.

The examples in (3.2) and (3.3) in chapter 3.1.1. above illustrate some of the senses of evidential meanings of perception verbs to represent indirect evidentiality. Perception verbs, however, are mostly used to present direct evidentiality in English. Sentences in (3.2) are examples of reported evidentiality. They all have a third person subject (Peter). In (3.4) below the subject of the sentences have been changed into first person:

(3.4) a. I saw the birds.
b. I heard the birds.
c. I felt a stone under his foot.
d. I tasted garlic in the food.
e. I smelled cigars in the room.

The sentences in (3.4) are all examples of direct sensory evidentiality expressed by perception verbs. The difference between (3.2) and (3.4) is only the subject. In (3.2) the subject was the perceiver of the event and the event was perceived 'involuntarily', unlike examples of dynamic verbs in (3.1). Sentences in (3.4), on the other hand, all have first person subject, the meanings of the perception verbs have changed from evidential reported to direct sensory. The subject is still the perceiver, the event is still perceived 'involuntarily'. The difference between the set of sentences in (3.1) and (3.2) lies in the speaker perspective: in (3.4) the event is presented from the speaker's perspective, the speaker has personal, direct experience of the event. In (3.2) the speaker did not personally witness the event described, he/she reported what someone else has seen/heard etc.

The relationship between evidentiality type and person has been noticed by Rooryck (2001a: 126), who said that for first person subjects, the type of evidence can only be sensory or inferential, whereas reported evidentials occur with third person. De Haan (2005: 6-7) has also noticed the correlation between person and type of evidence:

> "first person singular occupies a special position in evidential paradigms. There is an apparent incompatibility between indirect evidentiality and first person subjects. The reason is of course that it is very hard to have only indirect evidence for actions in which the speaker himself was the main participant".

For direct visual, olfactory etc. evidentiality, the speaker is the experiencer of the event, he/she has personal perception of what is being described, therefore the use of first person subject is perfectly justified. With reported evidentiality, on the other hand, the speaker has no direct perception of the event, therefore the subject is in third person – the speaker reports what the subject of the sentence has witnessed.

Perception verbs in English may also have different complementation. Sentences in (3.4) all have a physical object as a direct object of the verb: *the birds, a stone* etc. The subject of any of the sentences simply states what he/she saw/heard etc. Verbs of perception, however, can have other complementation as well. Sentences in (3.5) express the same proposition of John performing the action of running across the street. The three sentences, however, differ in meaning.

(3.5) a. I saw John run across the street.

b. I saw John running across the street.

c. I saw (that) John had crossed the road.

The verb *see* in a. is complemented with a bare infinitive. The use of bare infinitive implies that the speaker saw the whole event from the beginning till the end (Quirk et.al. 1985). The use of the gerund participle in example b., on the other hand, implies that the speaker has not witnessed the full event, he/she saw only a part of John running across the street. That means that John might as well have not crossed the street, he might have stopped half way through and turned back. Both sentences are examples of direct evidentiality – the speaker/subject of the sentence is the perceiver, the only difference lies in the verb complementation.

A different meaning is presented in sentence c. *See* here is followed by a *that*-clause. The clause *that John had crossed the road* seems to have a similar meaning to a. above. It is not, however, the case. Gisborne (2007) analyses such sentences as an instance of a different meaning of *see*: the sentence is not an instance of visual perception, *see* here has a meaning of 'understand'. De Haan (2005), on the other hand, analyses the sentence as a 'hybrid' between direct and indirect evidentiality. The speaker has not witnessed the whole event, but only its result. Therefore the sentence can be analysed as an example of indirect inferred evidentiality.

Sentences in (3.5) are examples of different complementation of the verb *see*. *See* in these examples can easily be substituted with *hear*:

(3.6) a. I heard John run down the stairs.

b. I heard John running down the stairs.

c. I heard (that) John had run down the stairs.

The meaning of the above sentences is similar to that with *see*. Sentence a. and b. illustrate direct auditory evidentiality: in a. the speaker heard John run all the way down the stairs, whereas in b. only part of the event was witnessed. Sentence c. can be analysed as an instance of reported evidentiality: the speaker has no direct evidence for the proposition, the evidence comes from someone else's report.

It is more difficult to find corresponding sentences (to (3.5) and (3.6) above) with the remaining verbs of perception: *feel*, *smell* and *taste*. Analyses of English perception verbs usually focus on *see* and *hear*. Nevertheless, it is technically possible to construe sentences with *feel*, *smell* and *taste* with the same complementation patterns as *see* and *hear* above. Sentences in (3.7) below are examples of *feel* with different complementation:

(3.7) a. I felt a mosquito bite my arm.
b. I felt a mosquito biting my arm.
c. I felt (that) a mosquito had bitten my arm.

The differences are analogous to that of *see* or *hear*: sentences a. and b. differ in the perception of the event (as a whole in a. and only part of the event in b.). Sentence c. can perhaps be analysed similarly to (3.5) c.: *feel* here does not denote direct tactile evidence, but has a meaning of indirect evidence: I can feel a stinging sensation in my arm, therefore I infer that I must have been bitten by a mosquito.

For *smell* and *taste* it is even more difficult to find corresponding examples. Sentences in (3.8) are construed to illustrate complementation of *smell* with bare infinitive, gerund participle and *that*-clause:

(3.8) a. I smelled the fish burn.
b. I smelled the fish burning.
c. I smelled that the fish had burnt.

Sentence b. is perfectly acceptable: it is possible to smell something burning while it is in the process of burning. A situation presented in sentence a. is perhaps harder to imagine as it seems difficult to follow the whole process of burning from start till finish only with the sense of smell. Example c. can be interpreted as an instance of inferred evidentiality: the smell of burnt fish leads to an expected conclusion that it must have burnt. Sentences in (3.9) are examples for *taste*:

(3.9) a. I tasted chocolate melt on my tongue.

b. I tasted chocolate melting on my tongue.

c. I tasted that chocolate had melted on my tongue.

Similarly to *smell*, example b. sounds right: the melting of chocolate is experienced at a point during the process. For a sentence a. to be correct, the speaker would have to experience the whole process of melting the chocolate from the beginning till the end. Sentence c., on the other hand, could have been uttered an instance of deductive evidentiality. Sentences (3.8) b. – c. and (3.9) b. – c., however, are marginal to evidentiality, examples like these are uncommon.

The verbs of senses in their perception meaning are generally used in the base form. They can, however, be used with the modal verb *can* (Palmer 2001):

(3.10) a. I can see the moon.

b. I can hear a funny noise.

c. I can smell something burning.

d. I can taste salt in this.

e. I can feel something hard here.

Can in the above examples does not mean that the speaker is able to see the moon, hear a funny noise etc., the sentences mean that "the speaker has the sensation, not that he has the ability to have it". The meaning of examples in (3.10) is equivalent to those in (3.11) below:

(3.11) a. I see the moon.

b. I hear a funny noise.

c. I smell something burning.

d. I taste salt in this.

e. I feel something hard here.

Both (3.10) and (3.11) denote that the speaker has a visual, auditory, olfactory, gustatory or tactile perception. The use of the modal verb *can* does not change this meaning.

Palmer (2001: 47) explains the fact that the verbs of senses are used with *can* by saying that "English does not normally present information about sensation with simple declarative statements, but chooses instead to use a modal form".

Perception verbs can also be used in a gerund participle form, like in (3.12) below:

(3.12) a. I'm seeing fewer Corvettes lately.
b. I'm hearing you perfectly well now.
c. I'm feeling the baby kicking.
d. You're smelling of cigarettes again!
e. You're tasting of cheap wine.

The use of present progressive in sentences a. – e. implies that the "emphasis is put upon the duration" of the event (Palmer 1974: 74): seeing fewer Corvettes is perceived by the speaker not as a stative event, but rather as something temporary, not usual. The use of the progressive aspect may sometimes mean also that the speaker emphasises the fact that the event is uncommon, "imaginary or hallucinatory" (Palmer 1974: 74) as in examples in (3.13) below:

(3.13) a. I'm seeing white elephants.
b. I'm hearing voices.

The above sentences illustrate a metaphorical sense of *see* and *hear*. The speaker has no sensory perception in a conventional sense, the seeing of elephants or hearing voices can be interpreted as instances of illusion, therefore sentences like above are not examples of evidentiality. It is hard to find similar examples with *feel*, *smell* or *taste* with metaphorical meaning.

Examples analysed so far are instances of perception verbs with subject as a perceiver. Evidential meaning, however, can also be carried by verbs of senses with a percept in the subject position. These verbs can also have various types of complementation. Examples in (3.14) illustrate the use of subject-percept perception verbs with adjectives:

(3.14) a. John looks sad.

b. Mary sounds tired.

c. The fabric feels creased.

d. The meat tastes undercooked.

e. The house smells fresh.

The above sentences can be analysed as examples of deductive evidentiality: the speaker asserts the look, sound, feel, taste, or smell of the percept (subject) based on sensory evidence (John's appearance, the taste of the meat etc.). The sentences are evaluative and involve speaker's judgement of the proposition: based on the look of John's face, the speaker assesses that she is sad, the meat seems to be undercooked based on its taste etc. The assessment presented in the sentences above is subjective, it is the speaker's judgement that leads him/her to a certain conclusion based on a given sensory evidence (smell, look etc.) (Gisborne 1998).

Perception verbs with percept subject are often followed with *like* and a noun phrase (3.15) or a clause (3.16):

(3.15) a. Peter looks like an accountant.

b. Mary sounds like a high school girl.

c. It feels like cotton.

d. The raspberry juice actually tastes like strawberry juice.

e. The conditioner smells like a fruit salad.

The speaker of the above sentences bases his/her deduction on sensory evidence, as such they are instances of inferred deductive evidentiality. *Like* here has a 'direct comparison' meaning, the subject of any of the sentences is compared to the complement of *like* (Gisborne 2010). Examples of clausal *like* complementation is presented in (3.16) below:

(3.16) a. Ann looks like she's very tired.

b. Mary sounds like she's very tired.

c. The floor feels like it's made of wood.

d. The cake tastes like it's made from scratch.

e. The steak smells like it's been charcoal grilled.

The above sentences are again examples of deductive evidentiality. The speaker bases his/her deduction on direct evidence. Anna's appearance makes the speaker draw a conclusion that she is tired, when touching the floor the speaker infers that it is made of wood, etc. Sentences with *like* (followed by a noun phrase or a finite clause) are evaluative and subjective as the speaker assesses the situation or event and comes to a conclusion based on a sensory evidence. Sentences with subject-percept verbs and *like* can be analysed in terms of modality: the speaker using *like* in a sentence distances himself/herself from the truth of the proposition more than when saying a similar sentence without the use of *like*. Sentences (3.14) b. and (3.16) b. are similar in that the speaker infers that Mary is tired based on auditory evidence. With (3.16) b., however, the speaker is less sure that what he/she is saying is actually true: with (3.14) b. the speaker has all the necessary evidence to deduce that Mary is tired, there is nothing else from the way Mary sounds to infer but that she is tired, with (3.16) the speaker may have less obvious evidence.

3.1.3. ENGLISH PERCEPTION VERBS AND EVIDENTIALITY - CONCLUSIONS

English perception verbs are polysemous depending on the type of situation described (stative, dynamic), the role of the subject (perceiver, percept), complementation type (adjective, noun phrase, clause etc.). The polysemy and argument structure of the perception verbs also translates into their evidential meanings. Perception verbs with subject-perceiver role can be interpreted as either examples of direct sensory or indirect evidentiality: sentences with first person subjects and non-finite complementation show direct evidentiality, while *that*-clause complementation indicates indirect evidential reading. Reported evidential meanings are illustrated by subject-perceiver verbs with third person subjects and subject-percept verbs.

3.2. OTHER WAYS OF INDICATING EVIDENTIALITY IN ENGLISH

Evidentiality in English can be represented by other means apart from perception verbs: verbs like *seem* or *appear*, modal verbs (*must, can, should*), adverbs (*presumably, apparently*), parentheticals (*it seems*) and a whole range of constructions used in reported speech (*it is said, Peter told me, they say*). *Seem* and *appear* are discussed in a separate chapter (3.2.1.) due to their polysemy and an array of complementation that influences evidential meanings encoded in the verbs. Chapter 3.2.2. deals with inferred evidentiality: different ways of indicating deductive and assumptive are shown. Finally, 3.2.3. illustrates means o expressing evidential meanings of reported evidentiality (quotative and hearsay) in English.

3.2.1. *SEEM* AND *APPEAR* AND EVIDENTIALITY

Seem and *appear* have similar complementation patters. *Seem* can be followed by an adjective, *that*-clause, *like*, it can be used as a parenthetical or followed by *to* and a clause, as shown in (3.17) below:

(3.17) a. Tom seems tired.
b. Tom seems to be tired.
c. It seems that Tom is tired.
d. It seems like Tom is tired.
e. She seems to be running late again.
f. Sam's got the sack, it seems.
g. It seems like Peter's gonna get what's coming to him. Sally won't forgive him for what he's done.

Sentences in a. and b. can be interpreted as examples of deductive evidentiality. The meaning is similar to *look* in subject-percept verbs in that the subject bases his/her statement on observation: by looking at Tom, I can infer that he is tired. Sentence c. is ambiguous between deductive and quotative reading. The speaker of c. may say the sentence having direct evidence (looking at Tom), or the speaker may simply quote what

someone else have told him/her. Sentence d. is similar in meaning to c., there is, however a lesser degree of probability in the case of d. Example e. can again be interpreted differently depending on context as either deductive (I can't see here in the building yet, so I infer she is running late), assumptive (someone tells me that she's not at her desk yet, even though I have no direct confirmation, knowing her I can confidently infer that she is running late again), or as an instance of reported (I simply repeat what someone else have told me). Sentence f. is also ambiguous between inferred and reported evidential meanings. If I can see Sam carrying a box of belongings to his car, than the sentence would be an example of deductive evidentiality. But the sentence may also have a hearsay meaning if I have learnt about Sam's leaving the job through office rumour, for instance. The final sentence carries the meaning of assumptive evidential: I've known Sally for ages and I know what she's capable of, I also know what Peter has done, and all that knowledge leads me to assume that Peter be punished.

Appear is another word with various evidential interpretations in English. It may not have as many complementation choices as *seem*, it occurs in various types of argument structure: followed by an adjective, *that*-clause, non-finite clause:

(3.18) a. Tom appears angry today.
b. Tom appears to be angry today.
c. Lisa appears to have a lot to do right now, she looks very busy.
d. It appears to be a complicated issue.
e. It appears that John can go with us after all.

Appear, similarly to *seem*, is polysemous and can be interpreted as expressing different meanings depending on context. It can be understood as a type of deductive evidential (examples a., b., c.), assumptive (as in d.) or reported (e.).

As can be seen from the above examples, both *seem* and *appear* can be interpreted as carrying various evidential meanings depending on context. Even though *seem* and *appear* cover mostly indirect evidential meanings, they also refer to sensory evidence when they are used to express deduction. *Seem* and *appear* are similar to subject-percept perception verbs both semantically and syntactically (Gisborne 2010).

3.2.2. INFERRED EVIDENTIALITY

Apart from the verbs mentioned above, English has other means to indicate the source of evidence. Inferred evidentiality can also be expressed via modal verbs, adverbs or adjectives in English. Sentences in (3.19) illustrate both subtypes of inferred evidentiality: deductive and assumptive:

(3.19) a. Susan must be in her office, I can see the light is on.
b. I can hear the car on the driveway, that must be Peter back from work.
c. It's already three, the kids will be home from school.
d. Peter will know the answer, he's a human Google.
e. It is probable that Paul's already left.
f. This has obviously been drawn by a child.

The modal verb must is used in sentences a. - d. The examples have the source of evidence presented. In the case of a. and b., the evidence is sensory (seeing the light, the sound of the car), which makes the reading of the sentences deductive. Assumptive is semantically similar to deductive, the difference lies in the nature of evidence: with deductive the source of evidence is sensory, whereas with assumptive the speaker bases his/her inference on experience, knowledge, reasoning. Sentences c. and d. have assumptive reading, there is no direct evidence for the proposition in the case of these two sentences, the speaker bases his/her on experience (example c.: it always the case that the kids are home at this hour) or knowledge (example d.: Peter is known to know all the answers). Palmer (1986, 2001) notices that English uses *must* for deductive evidentiality, while assumptive is usually marked by *will*.

English, however, does not always express the source of evidence (Chafe 1986). Sentence e. is ambiguous between deductive and assumptive. To be interpreted as deductive, the speaker would need some sensory evidence (Paul is not in his room, his coat is gone, etc.), the assumptive reading, on the other hand, would be based on the speaker's experience or reasoning only (it's 5 p.m. now, Paul works till five, so it is reasonable to assume that he has already left). Sentence f. is probably easier to interpret

as carrying deductive meaning as one would not speculate about the author of a drawing without looking at it.

3.2.3. REPORTED EVIDENTIALITY

Reported evidentiality in English can be indicated in different ways. Reported evidentiality can be distinguished between quotative, which indicates the source of evidence (who the speaker got the information from), and hearsay, which does not indicate a concrete source of evidence, the speaker learns about the information through rumour, gossip, shared knowledge).

English uses reported speech for reporting. Huddleston and Pullum eds. (2002: 1023) divide reported speech into two sub-types: direct and indirect reported speech: "(d)irect reported speech purports to give the actual wording of the original, whereas indirect reported speech gives only its content". The difference between the two sub-types is shown in (3.20):

(3.20) a. Peter said, "I'll meet you here tomorrow".
b. Peter said that he'd meet us there the next day.

Sentence a. is an example of direct speech, while b. illustrates indirect speech. Both a. and b. are complements of the verb *say*, in a., however, the embedded clause is identical to the original one said by Peter. In b., on the other hand, the original has been paraphrased by the speaker. We can observe deictic shift in the case of b.: *will* is substituted with the remote preterite form *would* personal pronoun *I* has been changed to *he*, place and time have also been changed. Reported speech is not limited to the kinds of sentences illustrated above. *Say* is only one of the verbs that can be used with reported speech, some of them being: *tell, ask, remark, reply, explain, comment, admit* etc.

Depending on the verb, the sentence has a different argument structure. Some can occur in parenthetical constructions only (Huddleston and Pullum 2002: 1027). With indirect reported speech, the embedded clause may either be a finite clause introduced with *that* (but also *if/whether* for reported questions) or a non-finite complement clause. Different complementation patterns are presented in (3.21)):

(3.21) a. “Can we go out?”, Carol asked.

b. Carol asked if we could go out.

c. Mum told me to clean up my room.

d. Susan suggested leaving half an hour earlier.

e. Tom said that we could finish earlier today.

f. Karen lives alone, she replied.

Only example a. is an instance of direct reported speech. Here the reporting verb is used in a parenthetical position as opposed to (3.20) a., were it was part of the superordinate clause. Sentences b. – f. are all examples of indirect reported speech. As with direct speech, the verbs of saying can be used either in a superordinate clause (b. – e.), followed by an embedded clause (original sentence), or in a parenthetical position (example f.), in which case the original sentence is in the main clause. Syntactic patterns differ in the above sentences depending on the verb used in the main clause: in examples b. and e., the embedded clause is a finite clause beginning with *if* and *that* respectively, in the case of c. and e., the original sentence is reported as a non-finite complement clause of the verb of saying. Semantically all sentences are instances of quotative evidentiality, the source of evidence is clearly stated, as the speaker indicates who he/she obtained the information from.

Reported speech can also be used to indicate hearsay evidentiality. In this case the speaker does not indicate who the original information comes from, often the information is part of rumour. Sentences in (3.22) all illustrate the use of reported speech to indicate hearsay evidentiality:

(3.22) a. They say that Peter and Anna are going to get divorced.

b. People say this school is one of the best in the area.

c. I’ve been told that the shops are open longer tomorrow.

d. She is said to be very picky.

e. Susan likes being in the centre of attention, or so I’ve been told.

None of the above sentences points to a specific person who the original information was obtained from. Again, syntactic patterns differ from embedded finite clauses (a.-c.), through a embedded non-finite construction (d.), to a proposition presented in a main clause with a reported construction in a parenthetical position (e.). The possible patterns of reporting the original information have not been exhausted above. Hearsay may also be indicated by adverbs as shown in (3.23) below:

(3.23) Apparently, Tom has bought a new car.

Apart from *apparently*, other adverbs may be used to indicate hearsay such as *supposedly, reportedly, allegedly*. These adverbs have different meanings, but they all can be understood as presenting information that the speaker has heard, but is unsure of (Chafe 1986: 268).

3.3. EVIDENTIALITY IN ENGLISH– CONCLUSIONS

English may not have grammaticalised evidentials, in the sense Aikhenvald (2004) uses the term evidential, it does not, however, lack in lexical forms that carry evidential meanings. Perception verbs form a large group of verbs with evidential meanings. They are polysemous and so the evidential reading denoted by a given perception verb depends on the argument structure of the sentence it is used in. Sensory evidentiality is indicated in English by perception verbs with a first-person subject in the perceiver role. Indirect evidentiality can be marked not only by perception verbs but by other forms as well, depending on the sub-type. Deductive evidentiality is presented by perception verbs with the subject in the role of percept, modal verbs (*must*), adverbs with modal meaning (*probably, certainly*) or *seem* or *appear*. Assumptive evidentiality is marked in a similar way as deductive, instead of *must*, however, *will* has more of an assumptive meaning (Palmer 1986, 2001). Reported evidentiality can also be marked by verbs *seem* and *appear* (context differentiates between quotative and hearsay). Quotative is usually marked by (direct or indirect) reported speech, while hearsay can be indicated by either reported speech or adverbs (*apparently, reportedly* etc.). The different lexical items presented in this chapter mark different types of evidentiality. Sometimes, English the

polysemous nature of a lexical item (like perception verbs) is reflected in the way a sentence with this particular word can be interpreted. The same verb, used with a different argument structure, may also be interpreted as carrying a different evidential meaning. As such, English definitely has a large variety of forms that mark all different types of evidentiality.

Table 2: "Evidentiality in English" summarises different lexical items presented in this chapter that have evidential meanings. Each type of evidentiality can be represented by various lexical items: the table outlines these representations.

Table 2: Evidentiality in English.

Evidentiality Type			Representations in English
Direct	**Visual** **Auditory** **Tactile** **Olfactory** **Gustatory**		1. subject-perceiver verbs: *see, hear, feel, taste, smell* (first person subject; noun phrase complementation; gerund participle complementation; bare infinitive complementation; with *can*; progressive aspect)
Indirect	**Inferred**	**Deductive**	1. subject-perceiver verbs: *see, hear, feel, taste, smell* (followed by a *that*-clause) 2. subject-percept verbs: *look, sound, feel, smell, taste* (followed by and an adjective; plus *like* and a noun phrase or finite clause) 3. verbs *seem* and *appear* 4. modal verb *must* 5. modal adverbs: perhaps, probably, certainly
		Assumptive	1. verbs *seem* and *appear* 2. modal verb *will*
	Reported	**Quotative**	1. subject-perceiver verbs: *see, hear, feel, taste, smell* (third person subject) 2. subject-percept verbs: *look, sound, feel, smell, taste* (in the past tense) 3. verbs *seem* and *appear* 4. reported speech (reference to concrete source of evidence)
		Hearsay	1. verbs *seem* and *appear* 2. reported speech (no reference to concrete source of evidence) 3. expressions: I've heard, I've been told, He/She is said to be etc. 4. adverbs: apparently, reportedly, supposedly, allegedly

Perception verbs encode different types of evidentiality in English. Dynamic verbs do not indicate the source of evidence, therefore are not analysed here. English has different lexemes for subject-perceiver and subject-percept verbs for visual and auditory perception (*see, hear* for subject-perceiver and *look, sound* for subject-percept verbs)

Tactile, gustatory and olfactory have the same representations for subject-perceiver and subject-percept verbs (*feel, taste* and *smell* respectively).

Stative perception verbs have various evidential meanings depending on the subject function (perceiver/percept), aspect, tense, complementation patterns etc. Subject-perceiver verbs can be interpreted as carrying direct sensory meaning when the subject is in the first person singular (personal experience of the perceiver) or reported, when the subject is in the third person.

Direct evidentiality is presented by direct subject-perceiver verbs. The verbs, however, have to be in the first person singular, as it is the speaker (perceiver) that indicates the source of evidence (perception). English verbs may occur with modal *can* without reference to epistemic or deontic modality. The verbs can have various complementation patterns: a simple noun phrase complementation or non-finite complements (gerund participle and bare infinitive).

Subject-perceiver verbs can also carry deductive and quotative evidential meanings. To be interpreted as showing deduction, English subject-perceiver verbs are followed by a *that*-clause. Quotative senses can be found in sentences with subject-perceiver verbs with third person singular subject in both languages.

Stative subject-percept verbs have deductive and reported meanings. If the sentences with subject-percept verbs are in the present tense, the reading would normally be interpreted as deductive. Sentences with verbs in the past tense are more ambiguous as they can either indicate past deduction of the speaker or a quotation, repeating what someone else have said. The verbs have different complementation patterns. The simplest complementation of the subject-percept verbs is an adjective. Evaluative meanings of subject-percept verbs are reflected by a *like* plus a noun phrase or a finite clause in English.

Apart from perception verbs, evidential meanings in English can be found in a number of other lexical items, such as modal verbs, modal adverbs or particles, verbs and expressions which can be analysed as evaluative, presenting the speaker's judgement. Such expressions are typically used to mark inferred (deductive and assumptive) evidentiality. Reported evidentiality, on the other hand, is most typically presented in reported speech, mostly to mark quotative as English forms reported sentences with reference to a concrete source of evidence (person to utter the original sentence).

Hearsay in English can be found in sentences with *seem* and *appear*, certain adverbs and reported speech expressions that do not indicate who was the author of the first sentence.

CHAPTER 4. EVIDENTIALITY IN POLISH

Similarly to English, Polish does not have mandatory grammaticalised evidentials. As in English, evidentiality in Polish is not part of a morphosyntactic system but the semantic category of evidentiality can be identified and the lexemes that have evidential senses can be established. The source of evidence in Polish is marked by verbs, parentheticals, particles etc. As in English, different types of perception verbs in Polish indicate different types of evidentiality depending on the argument structure and complements. Polish perception verbs are described in chapter 4.1. The list of evidential meanings of Polish perception verbs discussed here is not exhaustive. The examples provided are, however, common, the analysis could (in most cases) be applied to the full set of verbs describing each of the five senses. The chapter is divided into three sub-chapters: 4.1.1. describes types of Polish perception verbs, 4.1.2. analyses the relationship between the aspect of Polish perception verbs and evidentiality, while 4.1.3. presents how different complementation patters influence evidential reading.

Apart from perception verbs, Polish has other means to indicate various types of evidentiality. Indirect evidentiality may also be expressed via other means: adverbs, particles, defective verbs etc. Each type of indirect evidentiality is analysed in turn below.

4.1. POLISH PERCEPTION VERBS

Evidentiality in Polish is not marked by a set of grammaticalised inflections or particles. The source of evidence is mostly presented via lexical items. As with English, Polish has a set of verbs of perception that can be interpreted as pointing to different types of sensory evidence (visual, auditory etc.). Just like in English, Polish perception verbs can be used to describe certain sensory perception, and so denote direct evidentiality. Depending on the argument structure, Polish perception verbs can also be used to indicate indirect evidentiality. Different senses (often represented by different lexemes) are presented in 4.1.1. Contrary to English, Polish verbs usually have perfective and imperfective variants. Imperfective subject-perceiver and subject-percept verbs are stative in meaning and can be related to their English counterparts. Perfective subject-perceiver verbs have evidential readings, while perfective subject-percept verbs have a completely different

meanings. Chapter 4.1.2. describes the difference between perfective and imperfective aspect of Polish perception verbs and whether there is a difference in evidential reading depending on the aspect. Chapter 4.1.3., on the other hand, analyses the relationship between the subject person and type of evidentiality indicated by a sentence as well as different evidential readings encoded in Polish perception verbs depending on the type of complement.

4.1.1. TYPES OF PERCEPTION VERBS IN POLISH VERSUS TYPES OF EVIDENTIALITY

Polish perception verbs can be differentiated between those representing dynamic and stative senses. Dynamic perception verbs in Polish do not have evidential meaning. Stative perception verbs, on the other hand, can be interpreted depending on the subject role (subject-perceiver versus subject-percept verbs) or types of complements (as was the case in English).

The set of verbs interpreted as dynamic perception verbs are presented in (4.1) below[5]:

(4.1) a. Piotrek patrzył na
Piotrek-NOM look-PAST.IMPRFCTV.3SG.MASC at
obraz.
picture-SG.ACC
'Piotrek was looking at the picture.'

b. Ania słuchała muzyki.
Ania-NOM listen to-PAST.IMPRFCTV.3SG.FEM musicSG.GEN
'Ania was listening to the music.'

c. Dotykał ściany ręką.
touch-PAST.IMPRFCTV.3SG.MASC wall-SG.GEN hand-SG.INSTR
'He was touching the wall with his hand.'

d. Próbowałam / Kosztowałam / Smakowałam wino

[5] Only sentences with imperfective verbal aspect are presented, perfective equivalents are shown in Table 3 in chapter 4.1.2. Since dynamic perception verbs are not relevant to the analysis of evidentiality in Polish, sentences with perfective dynamic verbs are not presented.

try / taste / taste-PAST-IMPRFCTV-1SG.FEM wine-SG.ACC
w winiarni.
in winery-SG-LOC
'I was tasting wine in a winery.'

e. Kasia wąchała kwiatki.
Kasia-NOM smell-PAST.IMPRFCTV.3SG.FEM flower-PL.ACC
'Kasia was smelling the flowers.'

As dynamic perception verbs are not relevant to the analysis of evidentiality, they are not discussed in detail. It is, however, worth mentioning, that Polish does not have a one designated verb equivalent of English *taste* as illustrated in (4.1) d. The most popular form used in situations when one describes the act of tasting something is *próbować*, which is translated into English as 'try'/'sample'. *Kosztować* can also be used in a 'try'/'sample'sense, it is not that popular in this meaning though, it also means *cost*. *Smakować* is even more obsolete in its dynamic 'taste' sense, it is a lot more common in a stative verb sense (discussed later in this chapter). In its dynamic meaning, *smakować* means 'taste', 'savour' (taste to enjoy the flavor of something).

Apart from dynamic perception verbs, Polish has verbs corresponding to English stative perception verbs with subject-perceiver (*see, hear, feel, taste, smell*).To say that someone has perceived an object/situation via one of the senses, Polish uses perception verbs with a subject functioning as a perceiver/experiencer. As a pro-drop language, Polish not always has an overt subject, but it can be deduced from the verbal paradigm. Sentences in (4.2) illustrate subject-perceiver perception verbs in Polish:

(4.2) a. Widziałam psa z
see-PAST.IMPRFCTV.1SG.FEM dog-SG.ACC with
trzema nogami.
three-INSTR leg-PL.INSTR
'I saw a dog with three legs.'

b. Słyszałem dzwony kościoła.
hear-PAST.IMPRFCTV.1SG.MASC bell-PL.ACC church-SG.GEN
'I heard the bells of the church.'

c. Czułam kamienie pod stopami.
feel-PAST.IMPRFCTV.1SG.FEM stone-PL.ACC under foot-PL.INST
'I felt stones under my feet.'

d. Czułem czosnek w zupie.
taste-PAST.1SG.MASC garlic-SG.ACC in soup-SG.LOC
'I tasted garlic in the soup.'

e. Czułam lilie w pokoju.
smell-PAST.IMPRFCTV.1SG.FEM lily-PL.ACC in room-SG.LOC
'I smelled lilies in the room.'

All above sentences have first-person inferred subject (dropped as not obligatory in Polish) functioning as the perceiver. The verbs are complemented with a noun phrase, the head of the noun phrase is in accusative in all instances. The sentences can be interpreted as instances of direct, sensory evidentiality. Separate lexemes are used for visual (*widzieć*) and auditory (*słyszeć*) meanings, while only one verb (*czuć*) is used for tactile, gustatory and olfactory evidential senses. The differences in meanings are dependent on context, to be more specific, the speaker may use the noun *smak* ('taste'/'flavour') or *zapach* ('smell') for gustatory and olfactory senses respectively (if there is no noun used after *czuć*, the sense of touch is usually implied):

(4.3) a. Czułem smak czosnku.
feel-PAST.IMPRFCTV.1SG.MASC taste-SG.ACC garlic-SG.GEN
'I felt the taste of garlic.'

b. Czułam zapach lilii.
feel-PAST.IMPRFCTV.1SG.FEM smell-SG.ACC lily-PL.GEN
'I felt the smell of lilies.'

Examples in (4.3) are similar in meanings to examples d. and e. in (4.2). In (4.3) the object of perception *czosnek* (‘garlic’) and *lilie* (‘lilies’) directly following the perception verbs, whereas in (4.3) the perception verbs are followed by a noun phrase with nouns *smak* (‘taste’) and *zapach* (‘smell’*)* as heads of the noun phrases and the ‘proper’ objects of perception as complements.

Subject-perceiver verbs used in examples in (4.2) above denote personal sensory perception. The speaker of the sentence is the perceiver (it is me, not someone else, who saw the dog etc.), therefore the examples can be interpreted as instances of direct evidentiality.

Polish also has perception verbs with subject functioning as a percept, that is, the object of perception. In the case of subject-perceiver verbs, the object of perception is a verbal complement, while the experiencer is in the subject position. With subject-percept verbs, on the other hand, the object of perception is in the subject position. Sentences below illustrate Polish subject-percept verbs:

(4.4) a. Ania ładnie wygląda w tej sukience.
Ania-NOM prettily look-PRES.3SG in this dress-SG.LOC
‘Ania looks pretty in this dress.’

b. Ta muzyka brzmi
this-1SG.FEM music-SG.NOM sound-PRES.3SG
relaksująco.
relaxedly.
‘This music sounds relaxing.’

c. Ten materiał jest
this-1SG.MASC fabric-SG.NOM be-PRES.3SG
szorstki w dotyku.
rough-NOM.SG to touch-SG.LOC
‘This fabric is rough to the touch.’

d. Ta zupa smakuje wyśmienicie.
this-1SG.FEM soup-SG.NOM taste-PRES.3SG excellently
‘This soup tastes excellent.’

e. Te róże pachną pięknie.

this-1PL.FEM rose-PL.NOM smell-PRES.3PL beautifully

'These roses smell beautiful.'

Since Polish has no perception verb to supply for the sense of feeling (example c.), a phrase *być w dotyku* ('be to the touch') is used. Because of the use of the verb *być* ('be') in the phrase, it is not evaluative. Sentence (4.4) c. simply states the fact that the fabric is rough, it describes the property of the fabric. The sentence could still be used in an evidential sense, however, it would have to be disambiguated by context as to what type of evidentiality is presented: if the speaker is actually feeling the fabric and uttering the sentence at the same time, than the sentence would be interpreted as having sensory evidential meaning. The sentence could also be interpreted as an instance of reported evidentiality if the speaker has learnt about the texture of the fabric from someone else. The remaining sentences in (4.4) are examples of subject-percept perception verbs in Polish. Perception verbs are complemented with an adverb. Sentences a., b., d. and e. pertain to visual, auditory, gustatory and olfactory perception, respectively.

The last set of verbs that indicate sensory perception are predicative verbs, also called defective verbs, because they do not have a full inflectional paradigm. These verbs have unusual morphosyntactic behavior as they occur only in their base form, they do not inflect for person. Historically, predicative verbs *widać* ('see'), *słychać* ('hear'), *czuć* ('feel', 'taste', 'smell') had a full inflectional paradigm, only unconjugational infinitival forms retained till present day (Klemensiewicz et al. 1955: 365-6). Base form of perfective verbs is formed with an 'auxiliary' verb *być* ('be') and the relevant infinitival form. Only *być* (*be*) can inflect for tense or mood, in the present tense, *być* ('be') is not typically used (Nagórko, 2006; Bańko 2005). Examples of sentences with the use of predicative verbs are in (4.5) below:

(4.5) a. Dzisiaj wyraźnie widać góry.
today clearly see-PRED.V mountain-PL.ACC
'You/One can see the mountains clearly today.'

b. Słychać głośną muzykę.
hear-PRED.V loud-SG.ACC music-SG.ACC
'You/One can hear loud music.'

c. Czuć mokrą trawę pod stopami.
feel-PRED.V wet-SG.ACC grass-SG.ACC under foot-PL.LOC
'You/One can feel wet grass under the feet.'

d. Czuć bazylię w sosie.
taste-PRED.V basil-SG.ACC in souce-SG.LOC
'You/One can taste basil in the sauce.'

e. Czuć gaz w mieszkaniu.
smell-PRED.V gas-SG.ACC in flat-SG.LOC
'You/One can smell gas in the flat.'

None of the above sentences has a subject, predicative verbs are complemented with noun phrases in the accusative. Kibort (2006: 302) calls the predicative verbs "truly subjectless predicates", as opposed to predicates with no syntactically overt subject (like pro-drop constructions). Predicative verbs, since they are unconjugational infinitival forms, are impersonal, are not inflected for person. The sentences above are translated into English with the use of non-referential *you* or *one* as a subject: neither *you* nor *one* relates to a particular person. Kibort (2006: 304), however, notices that, due to their historical relation to subject-perceiver verbs *widzieć* ('see'), *słyszeć* ('hear') and *czuć* ('feel', 'taste', 'smell'), predicative verbs "are used exclusively in situations which involve animate (typically human) participants as agents/experiencers and they are interpreted accordingly".

Evidential meaning carried by imperfective subject-perceiver verbs with first-person singular subject is purely sensory. Predicative verbs, on the other hand, are ambiguous between direct sensory perception and reported meanings. The ambiguity may stem out from the fact that predicative verbs do not take subjects: with no subject in a sentence, the perception of the event cannot be contributed to a specific person, the speaker may or may not be the experiencer. Again, the correct interpretation is context-dependant. If the speaker says the sentence based on his/her sensory experience, than the sentences express direct evidentiality. The same sentences, however, may as well carry quotative evidential meaning if the speaker repeats what others have said.

As illustrated by the examples above, the interpretation of evidential meaning depends on the perception verb used in a sentence: dynamic verbs do not refer to the

source of evidence at all, hence are excluded from the analysis of evidentiality. Subject-perceiver verbs pertain to direct sensory evidentiality, while subject-percept verbs indicate deductive evidentiality. Predicative verbs, on the other hand, are more ambiguous and can be read as either indicating direct or inferred evidentiality depending on context. Next chapter 4.1.2. shows if and how evidential meaning encoded in Polish perception verbs is influenced by their aspect.

4.1.2. VERBAL ASPECT OF POLISH PERCEPTION VERBS AND EVIDENTIALITY

Polish has two equivalents for each of the English verbs: imperfective verbs and their perfective counterparts. The distinction between perfective verbs and their imperfective counterparts is, roughly speaking, the completion of the action: perfective verbs refer to the action viewed as a 'whole', completed, whereas imperfective verbs relate to actions that are durative, may still be ongoing[6] (Huddleston and Pullum eds. 2002: 124):

> "With perfective aspectuality, the situation is presented in its totality, as a complete whole; it is viewed, as it were, from the outside, without reference to any temporal structure or segmentation. (…) With imperfective aspectuality, the situation is not presented in its totality; it is viewed from within, with focus on some feature of the internal temporal structure or on some subinterval of time within the whole".

The aspectual distinction between perfective and imperfective verbs can only be seen in the future or past in Polish: since an action happening in the present is ongoing, it is not yet completed, therefore only imperfective verbs can be used in the present. There is disagreement among linguists whether the imperfective-perfective verb pairs in Polish should be treated as instances of the same lexemes with aspectual differences only, or as completely separate verbs (Bańko, 2005: 98). Nagórko (2006: 99) treats the aspectual pairs as forms of the same verb. The analysis of aspectual verb pairs is not relevant to the topic of this thesis, therefore are not discussed further. It is, however, worth mentioning that perfective verbs can be created in three different ways from their imperfective equivalents: by suffixation (*dotknął* – *dotykał*), prefixation (*czuł* – *poczuł*) or suppletion

[6] For an in-depth discussion of Polish verbal aspect see Młynarczyk (2004)

(*widzieć – zobaczyć*), with the last being the rarest. Sentences in (4.2) illustrate perfective uses of Polish dynamic perception verbs:

Polish dynamic perception verbs are not relevant to the analysis of evidentiality, therefore they are mentioned only briefly in here. Examples in (4.1) show imperfective dynamic verbs, dynamic verbs also occur in imperfective aspect, as shown in Table 3.

Just like with dynamic perception verbs, Polish has imperfective and perfective subject-perceiver verbs. Polish imperfective perception verbs with subject as a perceiver imply that the action of perception lasted for a longer period of time, examples of imperfective perception verbs are presented in examples (4.2) in chapter 4.1.1. Their perfective counterparts have slightly different meanings, examples are presented below:

(4.6) a. Zobaczyłam psa z trzema
see-PAST.PRFCTV.1SG.FEM dog-SG.ACC with three-INSTR
nogami.
leg-PL.INSTR
'I saw a dog with three legs.'

b. Usłyszałem dzwony kościoła.
hear-PAST.PRFCTV.1SG.MASC bell-PL.ACC church-SG.GEN
'I heard the bells of the church.'

c. Poczułam kamienie pod stopami.
feel-PAST.PRFCTV.1SG.FEM stone-PL.ACC under foot-PL.INST
'I felt stones under my feet.'

d. Poczułem czosnek w
taste-PRES.PRFCTV.1SG.MASC garlic-SG.ACC in
zupie.
soup-SG.LOC
'I tasted garlic in the soup.'

e. Poczułam lilie w pokoju.
smell-PRES.PRFCTV.1SG.FEM lily-PL.ACC in room-SG.LOC
'I smelled lilies in the room.'

It would be difficult to provide Polish-English translation that would adequately grasp the meaning difference between Polish imperfective-perfective verb pairs. Sentences in (4.2) and (4.6) are translated exactly the same, so for English *I saw a dog with three legs*, we have two options in Polish: *Widziałam* (imperfective: perceive through seeing) / *Zobaczyłam* (perfective: catch a sight of) *psa z trzema nogami*. The use of the imperfective verb implies that the 'seeing' is viewed by the speaker as a longer event, the situation may still be taking place, it is not bounded, the speaker's focus is on the event itself, not the change from one state to the other, as in the case of its perfective counterpart. Besides being viewed as heterogeneous, perfective verbs denote a completed event. Imperfective perception verbs as described above can be interpreted as states, whereas their perfective equivalents have characteristics of an achievement. The semantic differences between *widzieć* and *zobaczyć* ('see') are also applicable to the remaining verb pairs: *słyszeć/usłyszeć* ('hear') and *czuć/poczuć* ('feel', 'taste', 'smell').

Subject-percept verbs also have imperfective (as illustrated in examples in (4.4) in chapter 4.1.1. above) and perfective counterparts. Only imperfective subject-percept verbs have evidential meaning. The verbs have perfective equivalents, but there is a meaning shift (for instance the pair *wyglądać* (perfective, meaning 'look' corresponding to English subject-percept verb) – *wyjrzeć* (imperfective, with the meaning of 'look out of, through', as in: *wyjrzeć przez okno* – 'look out of the window'). Since perfective equivalents of subject-percept verbs have a completely different, unrelated to evidentiality, meaning, they are not analysed here at all.

Predicative verbs are defective forms that occur only in the infinitive, as such they do not have the perfective/imperfective distinction. The relation between perfective verbs and imperfective subject-perceiver verbs can be seen in their syntactic complementation (both types of verbs take noun phrases in the accusative) and semantic meaning (they denote a durative, atelic, homogenous event that is involuntary of the speaker).

Table 3 summarises different types of Polish perception verbs including perfective/imperfective equivalents:

Table 3: Polish perception verbs.

Type of sensory perception	Types of verbs					
	Dynamic (activity)		Subject-perceiver verbs		Subject-percept verbs	Predicative verbs
	Imperfective	Perfective	Imperfective	Perfective		
	Example (4.1)	n/a	Example (4.2)	Example (4.6)	Example (4.4)	Example (4.5)
SIGHT	*patrzeć*	*spojrzeć*	*widzieć*	*zobaczyć*	*wyglądać*	*(być) widać*
HEARING	*słuchać*	*posłuchać*	*słyszeć*	*usłyszeć*	*brzmieć*	*(być) słychać*
TOUCH	*dotykać*	*dotknąć*	*czuć*	*poczuć*	*być w dotyku*	*(być) czuć*
TASTE	*próbować / kosztować / smakować*	*spróbować / skosztować / posmakować*	*czuć*	*poczuć*	*smakować*	*(być) czuć*
SMELL	*wąchać*	*powąchać*	*czuć*	*poczuć*	*pachnieć*	*(być) czuć*

Since dynamic perception verbs have no evidential meanings, they are not discussed in here.

Subject-perceiver perception verbs have two related forms: imperfective and perfective, as illustrated by sentences (4.2) and (4.6), respectively. The sentences have a covert subject, but still, the inflectional endings of the verb imply that it is in the first-person singular. The subject (and speaker at the same time, since it is in the first person) of the sentences is the perceiver (experiencer) of the event. The verbs are complemented with an object of perception, which, in the case of sentences (4.2) and (4.6) is a noun phrase in the accusative. Both imperfective as well as perfective subject-perceiver verbs pertain to sensory perception and have direct evidential meaning. As can be noticed from the table, the same lexeme *czuć* is used for tactile, gustatory and olfactory perception in imperfective subject-percept verbs and predicative verbs.

Sentences in (4.4), on the other hand, have the object of perception (percept) as their subject. The look, sound, smell etc. of the percept is evaluated by the use of an adverb, which functions as the complement of the verb. The adverb does not have to be placed after the verbs at all times, in (4.4) a. adverb *ładnie* (‘prettily’) precedes the verb *wyglądać* (‘look’). Polish has separate subject-percept verbs to describe visual, auditory, gustatory and olfactory perception, it does not have one for tactile perception, therefore a phrase phrase *być w dotyku* (‘be to the touch’) is used. When discussing the meaning of the phrase above, it has been mentioned that it is ambiguous in meaning between inferred and reported evidentiality. The remaining sentences, however, can be interested as examples of deductive evidentiality due to the use of proximal determinatives *ta, ten* (‘this’) and *te* (‘these’): since the object of perception is close to the speaker, it may be deduced that the speaker actually refers to the object of perception when describing its

properties, hence deductive evidential reading would be acceptable. The context of the utterance would be necessary to establish an unambiguous meaning, though. Other evidential meanings of Polish subject-percept verbs are discussed further.

Predicative verbs constitute the final set of perception verbs presented in the table. As has been mentioned before, they appear in "truly subjectless" sentences (Kibort 2006). The noun phrases complementing the verbs in examples (4.5) are in the accusative, they are the objects of perception. Kibort (2006: 304) explains the argument structure of the predicative verbs by the fact that "they use the same lexical roots as the corresponding personal verbs which have agents/experiencers: słyszeć 'hear', widzieć 'see', czuć 'feel', etc.". This is the reason why they are used only when an animate perceiver is involved. The historical relationship between the imperfective subject-perceiver verbs and predicative verbs may also account for the fact that they have similar Aktionsart as both refer to stative, involuntary perception events.

4.1.3. ARGUMENT STRUCTURE AND COMPLEMENTATION PATTERNS OF POLISH PERCEPTION VERBS AND EVIDENTIALITY TYPES

Polish perception verbs are polysemous, evidential meaning encoded in any of the verbs is determined by the argument structure. The change of subject from first to third person, for instance, influences the evidential reading of the sentence. Similarly, different complements determine the evidential meaning of the verb. Firstly, the influence of the choice of subject person on the evidential meaning of perception verbs is discussed. Later in the chapter, different complementation patterns are analysed (non-finite complementation or finite clause complementation).

Sentences in (4.2) from chapter 4.1.1. illustrate imperfective subject-perceiver verbs with a first person singular subject. The use of the first person singular subject indicates that the speaker is the perceiver and, therefore, denote direct sensory evidentiality. Below, the same sentences were repeated, but the first person subject has been changed into a third person subject:

(4.7) a. Widziała psa z
see-PAST.IMPRFCTV.3SG.FEM dog-SG.ACC with
trzema nogami.
three-INSTR leg-PL.INSTR
'She saw a dog with three legs.'

b. Słyszał dzwony kościoła.
hear-PAST.IMPRFCTV.3SG.MASC bell-PL.ACC church-SG.GEN
'He heard the bells of the church.'

c. Czuła kamienie pod
feel-PAST.IMPRFCTV.3SG.FEM stone-PL.ACC under
stopami.
foot-PL.INST
'She felt stones under my feet.'

d. Czuł czosnek w
taste-PAST.IMPRFCTV.3SG.MASC garlic-SG.ACC in
zupie.
soup-SG.LOC
'He tasted garlic in the soup.'

e. Czuła lilie w
smell-PAST.IMPRFCTV.3SG.FEM lily-PL.ACC in
pokoju.
room-SG.LOC
'She smelled lilies in the room.'

The use of the third person subject changes the meaning of the above sentences as compared to those in (4.2). Sentences with the first person subject are interpreted as examples of direct evidentiality. Sentences with the third person subject, on the other hand, express reported, quotative evidentiality: the speaker does not refer to his/her own experiences, but someone else's.[7]

[7] Similar shift of evidential meaning can be observed with perfective subject-perceiver verbs. Examples in (4.5) indicate sensory evidentiality, they have a first person subject. If the subject of the sentences is

Only perception verbs with simple argument structure (non-finite complements) have been presented so far, below, the verbs (with the exception of dynamic perception verbs) are analysed in different complementation patterns, which affects their meaning as well.

Imperfective subject-perceiver verbs may also be complemented with a finite clause introduced with a conjunction *jak*, as shown in (4.8) below:

(4.8) a. Widziałam, jak Piotr
see-PAST.IMPRFCTV.1SG.FEM CONJ Piotr -NOM
pił piwo.
drink-PAST.IMRFCTV.3SG.MASC beer-SG.ACC
'I saw Piotr drinking beer.'

b. Słyszałem, jak pies
hear- PAST.IMPRFCTV.1SG.MASC CONJ dog-SG.NOM
sąsiada szczekał
neigbour-SG.GEN bark-PAST.IMPRFCTV.3SG.MASC
w ogrodzie.
in garden-SG.LOC
'I heard the neighbour's dog barking in the garden.'

c. Czułam, jak pies
feel-PAST.IMPRFCTV.1SG.FEM CONJ dog-SG.NOM
lizał moją
lick-PAST.IMPRFCTV.3SG.MASC my-SG.ACC.FEM
rękę.
hand-SG.ACC
'I felt the dog licking my hand.'

Above are only examples for seeing, hearing and feeling with a finite *jak*-clause, it is very difficult to find examples for tasting and smelling. *Jak* is used as a conjunction in the

changed into third person, the meaning will also change into quotative (analogically to sentences with imperfective verbs).

above sentences, one of the meanings of *jak* presented in Uniwersalny słownik języka polskiego (Usjp: Universal Dictionary of the Polish Language) is that it introduces a subordinate clause, which describes an event or situation that was happening during, or finished happening just before the event or situation described in the superordinate clause.

The perception verbs in sentences in (4.8) above are imperfective as well as verbs in the subordinate finite *jak*-clauses. The Aktionsart of imperfective verbs suggests that the situation or event was durative. *Jak* in the case of the above sentences joins two events that were happening at the same time, as such the sentences have similar meaning to English sentences with subject-perceiver verb complemented with a gerund participle. Similarly to English, the sentences express direct sensory evidentiality. In example a., for instance, the speaker saw Piotr drinking beer, seeing 'lasted' as long as drinking, Piotr may have continued drinking beer after seeing has stopped. Similar analysis can be applied to examples b. and c.[8]

Subject-perceiver verbs in Polish can also be complemented with finite clauses joined with *że* ('that'). Kryk (1979: 152) gives examples of sentences with *że* ('that') as Polish equivalents of English sentences with subject-perceiver verbs complemented with bare infinitive (illustrating perception sense of the verbs) and with a finite *that*-clause (to show 'cognitive' use of the verbs[9]). As equivalents of English sentences with bare infinitive complementation, Kryk(1979: 152) gives examples of sentences with both perfective and imperfective verbs in the subordinate *że*-clause. In the footnote she says that "the author feels completion is better expressed in Polish by perfective aspect, however, (…) some native speakers of Polish claim that the non-perfective form is equally possible". Indeed, it is possible to create sentences with the use of both perfective and imperfective verbs with the *że*-clause, the choice of the verbal aspect, however, changes its meaning. Sentences in (4.9) show examples with imperfective verbs, while sentences in (4.10) are examples with perfective verbs in the subordinate *że*-clauses (as with *jak*-

[8] Sentences with perfective subject-perceiver verbs and *jak*-clauses are semantically incorrect. Since one of the meanings of *jak* is 'while, during', it would sound 'awkward' to combine a non-durative perfective verb with a *jak*-clause: both superordinate and subordinate clauses need imperfective, durative verbs.

[9] Kryk (1979: 147) uses the term 'cognitive' to "cover the meanings of *see, hear, feel* denoting 'understanding', 'having got the information'. and 'belief' or 'conviction', respectively".

clauses, it is difficult to find unequivocal examples for gustatory and olfactory perception):

(4.9) a. Widziałam, że Piotr
see-PAST.IMPRFCTV.1SG.FEM that Piotr -NOM
pił piwo.
drink-PAST.IMRFCTV.3SG.MASC beer-SG.ACC
'I saw Piotr drinking beer.'

b. Słyszałem, że pies
hear-PAST.IMPRFCTV.1SG.MASC that dog-SG.NOM
sąsiada szczekał
neigbour-SG.GEN bark-PAST.IMPRFCTV.3SG.MASC
w ogrodzie.
in garden-SG.LOC
'I heard the neighbour's dog barking in the garden.'

c. Czułam, że pies
feel-PAST.IMPRFCTV.1SG.FEM that dog-SG.NOM
lizał moją
lick-PAST.IMPRFCTV.3SG.MASC my-SG.ACC.FEM
rękę.
hand-SG.ACC
'I felt the dog licking my hand.'

The above sentences have imperfective verbs following the *że* ('that') conjunction. Since imperfective aspect indicates a durative, atelic event, the sentences are compared with English sentences with gerund participle complementation: both gerund participle and Polish imperfective aspect describe events or situations that are durative, not bound and do not indicate change. Such sentences denote direct sensory evidentiality.

Perfective aspect, on the other hand, indicates a complete action, a change from one state to the other. Sentences below illustrate the use of perfective verbs in the subordinate clause:

(4.10) a. Widziałam, że Piotr
see-PAST.IMPRFCTV.1SG.FEM that Piotr -NOM
wypił piwo.
drink-PAST.PRFCTV.3SG.MASC beer-SG.ACC
'I saw Piotr drink beer. / I saw that Piotr had drunk beer.'

b. Słyszałem, że pies
hear- PAST.IMPRFCTV.1SG.MASC that dog-SG.NOM
sąsiada zaszczekał
neigbour-SG.GEN bark-PAST. PRFCTV.3SG.MASC
w ogrodzie.
in garden-SG.LOC
'I heard the neighbour's dog bark in the garden. / I heard that the neighbour's dog had barked in the garden.'

c. Czułam, że pies
feel-PAST.IMPRFCTV.1SG.FEM that dog-SG.NOM
polizał moją rękę.
lick-PAST. PRFCTV.3SG.MASC my-SG.ACC.FEM hand-SG.ACC
'I felt the dog lick my hand. / I felt that the dog had licked my hand.'

The above sentences have perfective verbs in the subordinate clauses, that indicates that the action seen, heard or felt is complete. The sentences are ambiguous in their interpretation, which is reflected in the English translation provided. Further context is needed to disambiguate the interpretations. On one hand, the sentences can be understood as instances of direct sensory evidentiality. Such denotation is reflected in the English translation with the use of bare infinitive complementation. On the other hand, the sentences can be viewed as examples of indirect evidentiality, in which case translation with a *that*-clause is more relevant. Sentence a. means that either the speaker saw Piotr drink the whole beer (direct perception) or that seeing an empty beer glass in front of Piotr, the speaker inferred that Piotr had drunk the beer (deductive evidentiality reading). Sentence b. may also be read as an example of sensory evidential meaning: the speaker actually heard the dog bark. It may also be interpreted as an instance of indirect evidentiality: in this sense *słyszeć* ('hear') is understood, not in its personal perception

sense, but as an indication of hearsay evidentiality (the speaker of b. may simply repeat what he has heard). Similarly, sentence c. has direct and indirect evidential meanings. In its direct evidential sense, the sentence the sentence relates the speaker's tactile perception. On the other hand, *czuć* ('feel') may mean to come to realize something, in which case sentence c. should be read as expressing deductive evidentiality.[10]

Polish subject-percept verbs analysed in (4.6) are followed with an adverb. Tactile perception is an exception in this set of verbs, as Polish has no separate subject-percept verb for the sense of touch, instead a phrase *być w dotyku* ('be to the touch') is used. This is why, it is not possible to construe sentences with different complementation patterns as with other verbs in the set. For this reason, sentences for the sense of touch are not analysed within the set of subject-percept verbs. Sentences in (4.11) illustrate the use of subject-percept verbs with *jak* followed by a noun phrase:

(4.11) a. Wygląda jak nauczyciel.
look-PRES.3SG like teacher-SG.NOM.MASC
'He looks like a teacher.'

b. Brzmi jak śpiewak operowy.
sound-PRES.3SG like singer-SG.NOM opera-ADJ.NOM.MASC
'He sounds like an opera singer.'

c. Ten koniak-SG.NOM smakuje jak
This-MASC Cognac taste-PRES.3SG like
tania podróbka.
cheap knock-off-SG.NOM
'This Cognac tastes like a cheap knock-off.'

d. Ten krem pachnie jak
This-MASC carem-SG-NOM smell-PRES.3SG like
cytryna.

[10] Sentences in (4.10) and (4.11) are examples of imperfective subject-perceiver verbs followed by a *że*-clause. Similar sentences can be construed with the use of perfective subject-perceiver verbs (*zobaczyć, usłyszeć, wypić*). The evidential meanings presented by the sentences with perfective verbs are similar to those indicated by examples with imperfective verbs. Due to space constraints, sentences with perfective verbs are not analysed here.

lemon-SG.NOM

'This cream smells like a lemon.'

Jak in the above sentences has a different meaning to that shown by sentences in (4.8). In examples (4.8) *jak* is used as a conjunction introducing a subordinate clause. Here, *jak* has a different meaning of a comparative particle. The speaker of the above sentences evaluates the object of his/her perception, compares it to a different object. As such, the sentences can be analysed in terms of modality. As to evidential meaning, the sentences can be read as examples of inferred deductive evidentiality: his/her looks make the speaker infer that he/she could be a teacher, the taste of Cognac makes the speaker infer that it can't be the 'real thing' etc.

Similar sense is illustrated in (4.12) below. Here, the subject-percept verbs have a sentential complement introduced by a comparative conjunction *jakby* ('as if'/'as though'):

(4.12) a. Wygląda jakby był
look-PRES.3SG as if be-PAST.PRFCTV.3SG.MASC
nauczycielem.
teacher-SG.INSTR
'He looks as if he were a teacher.'

b. Brzmi jakby był
sound-PRES.3SG as if be-PAST.PRFCTV.3SG.MACS
śpiewakiem operowym.
singer-SG.NOM opera-ADJ.INSTR
'He sounds as if he were an opera singer.'

c. Polewa smakuje jakby była
icing-SG.NOM taste-PRES.3SG as if be-PAST.3SG.FEM
zrobiona ze starej
make-PAST.PRFCTV.3SG.FEM of old-GEN
czekolady.
chocolate-SG.GEN
'The icing tastes as if it was made of old chocolate.'

d.	Ciasto	pachnie	jakby	się
	cake-SG.NOM	smell-PRES.3SG	as if	REFL.PRON
	spaliło.			
	burn-PAST.PRFCTV.3SG.NEUT			
	‘The cake smells as if it burnt.’			

Jakby in the above sentences introduces a finite subordinate clause with a verb in the past tense. Similarly to sentences with *jak* (‘like’), sentences with *jakby* (‘as if’) have modal, evaluative meaning: the speaker assesses the properties of the percept (subject in the superordinate clause) and compares it to something else (complement in the subordinate clause). Contrary to English translations with *as if*, the use of past tense in the subordinate clause does not make the possibility that the percept actually has the properties as described after *jakby* even more remote. Sentences (4.11) a. and (4.12) a. are similar: the speaker attributes the qualities of a teacher to the object of his/her perception based on the percept’s looks. In the case of example (4.12) a., however, the possibility that he actually is a teacher is very close (Usjp). Examples (4.12) b. – c. can be analysed similarly to a.: the way he sounds makes it very probable to deduce that he is an opera singer, he certainly has the properties of an opera singer; the taste of the icing makes it probable to infer that it was made of old chocolate; the smell of the cake makes it probable to assume it is burnt. The sentences still show a ‘hint’ of uncertainty on behalf of the speaker, but the probability is not very remote. Sentences with *jak* followed by a noun phrase and *jakby* plus a sentential complement have a similar evaluative meaning, it is not surprising to say that they also carry a similar evidential meaning: the speaker bases his/her assessment on the look/sound/smell/taste of the object of perception, therefore the sentences can be interpreted as instances of deductive evidentiality.

Deductive evidentiality is also illustrated by perfective verbs. Perfective verbs presented in (4.6) had a noun phrase complementation, they were ambiguous in meaning between direct and indirect (deductive) senses. Below, perfective verbs have finite sentences as their complements:

(4.13)	a.	Widać,	że	ćwiczy	od	lat.
		see-PRED.V	that	practice-PRES.3SG	for	year-PL.GEN

‘You/One can tell that he/she has been practicing for years.’

b. Słychać, że śpiewa na żywo.
hear- PRED.V that sing-PRES.3SG PREP live
‘You/One can hear that he/she is singing live.’

c. Czuć, że podłoga
feel-PRED.V that floor-SG.NOM
zrobiona jest z drewna.
make -PASS.PART.SG.FEM be-PRES. 3SG of wood-SGT.GEN
‘You/One can feel that the floor is made of wood.’

d. Czuć, że mięso jest
taste-PRED.V that meat-SGT.NOM be-PRES.3SG
niedogotowane.
undercooked
‘You/One can taste that the meat is undercooked.’

e. Czuć, że ciasto jest
smell-PRED.V that cake-SG.NOM be-PRES.3SG
spalone.
burn-PASS.PART
‘You/One can smell that the cake is burnt.’

The above sentences are complemented with a finite clause introduced with *że* (‘that’). As has been previously mentioned, predicative verbs are subjectless. Indeed, the superordinate clause (containing only a predicative verb) has no subject at all, the sensory perception, however, refers to the subject of the subordinate clause. The sentences are examples of deductive evidentiality: they are uttered in a context-dependant situation, and as such relate to sensory perception, the sensory perception, however, is not the main focus of attention as in the case first person subject-perceiver verbs, but only the background for the speaker’s reasoning.

Polish perception verbs carry different evidential meanings, depending on the argument structure or verbal aspect of the verb. Subject-perceiver verbs (perfective and imperfective) have direct evidential meaning when they have first person singular subjects and are complemented with a noun phrase. Imperfective subject-perceiver verbs

complemented with a finite clause introduced with *że* or *jak* with imperfective verbs also have direct evidential meaning. Perfective subject-perceiver verbs with first person subjects cannot be followed by *że*- or *jak*-clauses with imperfective verbs. Sentential complements with *że*-clauses and perfective verbs are ambiguous between direct and indirect readings. Subject-perceiver verbs with third person subject have quotative meaning. Subject-percept verbs, on the other hand, have direct evidential meaning when followed by an adverb, deductive – when complemented with *jak* plus a noun phrase, or with *jakby* introducing a subordinate clause. The interpretation of predicative verbs complemented with a noun phrase is context dependant and ambiguous between direct and reported readings. When followed by a *że*-clause, predicative verbs can be interpreted as carrying deductive meaning.

4.2. OTHER WAYS OF INDICATING EVIDENTIALITY IN POLISH

Evidential meaning can be found not only in perception verbs discussed in chapter 4.1. above, but also in a number of other items such as particles, adverbs, expressions, modal verbs etc. Chapter 4.2.1. below gives examples of devises that can be interpreted as pertaining to inferred evidentiality. Chapter 4.2.2., on the other hand, analyses reported evidentiality in Polish.

4.2.1. INFERRED EVIDENTIALITY

Inferred evidentiality can be divided into two types: deductive and assumptive evidentiality. This chapter presents lexical items and expressions in Polish that can be read as pertaining to these two types of evidentiality.

Deductive evidentiality is a type of inferred evidentiality, the speaker has some sensory evidence (seeing a resultant state of a situation or event) to draw a conclusion that something is the case. Sentences below refer to deductive evidentiality:

(4.14)	a.	Trawa	jest	mokra,	widocznie
		grass-SG.NOM	be-PRES.3SG	wet.SG.FEM	apparently
		w nocy	padało.		

at night-SG.LOC rain-PAST.IMPRFCTV.3SG

'Grass is wet, apparently it was raining at night.'

b. Dziecko było wyraźnie
child-SG.NOM be-PAST.SG.NEUT evidently
zmęczone, płakało
tired-PAST.PART cry-PAST.IMPRFCTV.3SG.NEUT
nieustannie.
continuously
'The baby was evidently tired, it was crying continuously.'

c. Mam dreszcze, zdaje się,
have-PRES.1SG shiver-PL.ACC seem-PRES.3SG REFL
że będę chory.
that be-FUT.1SG ill-MASC
'I'm shivering, it seems I'm goining to get ill.'

d. Wydaje się, że będzie padać.
seem-PRES.3SG REFL that be-FUT.3SG rain-INF
'It seems that it's going to rain.'

e. Mieszkanie wygląda niesamowicie!
flat-SG.NOM look-PRES.3SG incredibly
Musieliście wydać majątek na
must-PAST.2PL spend-INF fortune-SG.ACC PREP
remont.
renovation-SG.ACC
'The flat looks incredible! You must have spent a fortune to renovate.'

Example a. shows the use of particle *widocznie* ('apparently'). The speaker of this sentence infers that it was raining based on sensory evidence (wet grass). *Wyraźnie* ('evidently') in sentence b. also refers to perceptual evidence: the constant crying of the baby makes the speaker deduce that it is was tired. *Wyraźnie* here is an adverb modifying the adjectival participle *zmęczony* ('tired'). Verbs *zdawać się* from sentence c. above and *wydawać się* from d. have a very similar meaning. Both can be translated as 'it

seems/appears that…'. *Zdawać się* and *wydawać się* się are complemented with a *że*-clause in the sentences above[11]. The final example in (4.14) shows the use of a modal verb *musieć* ('must') with deductive meaning: seeing the renovated flat, the speaker infers that it must have cost a fortune.

All above examples illustrate different lexical items used to refer to deductive evidentiality. Sentences below, on the other hand, refer to assumptive evidentiality:

(4.15) a. Piotrek będzie wiedział
Piotrek-NOM be-FUT.3SG know-PAST.PART.3SG.MASC
co zrobić w tej sytuacji.
what do-PRFCTV.INF in this situation-SG.LOC
'Piotrek will know what to do in this situation.'

b. Musi być ciężko wychowywać
must-PRES.3SG be-INF hard-ADV raise-INF
troje dzieci samotnie.
three-PL.ACC child-PL.ACC alone-ADV
'It must be hard to raise three children alone.'

c. Pewnie nie będzie
probably not be-FUT.3SG
umiała tego zrobić.
know-PAST.IMPRFCTV.3SG.FEM this do- PRFCTV.INF
'She probably won't know how to do this.'

d. Może będzie znała
Maybe be-FUT.3SG know-PAST. IMPRFCTV.3SG.FEM
odpowiedź na twoje pytanie.
answer -SG.ACC for yourSG.ACC question-SG.ACC
'Maybe she will know the answer to your question.'

e. Kamil prawdopodobnie znowu się
Kamil-NOM probably again REFL
spóźni.

[11] For a more in-depth analysis of *zdawać się* and *wydawać się* see Weimer (2006).

be late-FUT.PRFCTV.3SG

'Kamil will probably be late again.'

Sentences a. and b. illustrate the use of verbs with modal meaning. Sentence a. uses verb *być* ('be') in a modal sense similar to English *will*. The speaker of the sentence is confident that Piotrek will know what to do in a difficult situation, he/she knows Piotrek well enough to say this, confidence is based on knowledge, experience. Similarly in b., the speaker knows the world well enough to utter such a sentence. In c. and d. modal particles *pewnie* ('probably') and *może* ('maybe') are used, in both sentences the speaker speculates if the proposition is possible (with more possibility expressed in c.), the speculation is again based on the speaker's knowledge of the person in question (implied subject of the sentence). Final example shows the use of adverb *prawdopodobnie* ('probably') with modal meaning. Yet again, the speaker knows Kamil well enough to state that he will be late again (he always comes late). All sentences in (4.15) can be understood as ways of indicating assumptive evidentiality, the speaker assumes that the preposition is more or less true based on his/her knowledge or experience.

4.2.2. REPORTED EVIDENTIALITY

Reported evidentiality can be differentiated between quotative and hearsay. Quotative in Polish is mostly represented by reported speech. Hearsay, on the other hand

Polish has quite a few means of indicating reported evidentiality. To indicate quotative evidentiality, Polish uses reported speech. Some examples of sentences with quotative meanings are presented below.

(4.16) a. Magda powiedziała, że
Magda-NOM say-PAST.PRFCTV.3SG.FEM that
spotykamy się o piątej.
meet-PRES.1PL REFL.PRON at five-SG.LOC
'Magda said that we are meeting at five.'

b. Mama kazała mi
mum-SG.NOM tell-PAST.PRFCTV.3SG.FEM me

posprzątać mój pokój.
clean-INF my room-SG.ACC
‘Mum told me to clean my room.’

c. Studenci pytali o
student-PL.NOM ask-PAST.IMPRFCTV.3PL.MASC about
terminy egzaminów końcowych.
date-PL.ACC exam-PL.GEN final-PL.GEN.MASC
‘Students asked about the dates of the final exams.’

d. Zapytałem, czy mogę wyjść
ask-PAST.PRFCTV.1SG.MACS if can-PAST.1SG leave-INF
dzisiaj wcześniej.
today earlier.
‘I asked if I could leave earlier today.’

e. Jego zdaniem, obecna
his-GEN opinion-SG.INSTR present-NOM.FEM
polityka rządu negatywnie
politics-SG.NOM government-SG.GEN negatively
wpływa na wizerunek Polski.
influence-PRES.3SG.FEM on image-SG.ACC Poland.GEN
‘In his opinion, the present government politics has a negative influence on Poland’s image.’

f. Według wyników sondaży partia
according to result-PL.GEN poll-PL.GEN party-SG.NOM
konserwatywna ma
conservative-SG.NOM.FEM have-PRES.3SG
mniejsze szanse na wygranie
little-PL.ACC.COMP chance-PL.ACC to win-GER
w wyborach.
at election-PL.LOC
‘According to the poll results, the conservative party has less chance to win the election.’

The above examples are only a few possibilities that can occur in the reported speech in Polish. Examples a. – d. show different types of sentences being reported: a. for declarative, b. for imperative, c. for a wh-question and d. for a yes-no question. Depending on the type of sentence reported, different complementation patterns are possible (*że*-clause in a., non-finite clause in b., prepositional phrase in c., and a *czy*-clause in d.)[12]. Sentences e. and f. are different in that they are not typical instances of indirect speech. Example e. uses a phrase *czyimś zdaniem* ('in somebody's opinion'), Wiemer (2006: 32) calls the expression a "petrified (lexicalized) instrumental case of *zdani*e ‚opinion'". In example f., on the other hand, a preposition *według* ('according to') is used. The two expressions differ not only in the type of complementation they can take. *Zdaniem* usually preceded by a personal pronoun in genitive (as in e. above), or followed by a person, also in genitive. *Według* can be followed by a noun phrase denoting an institution or body (such as government, police etc.) or it can also refer to a document (such as a poll in f. above), report, story etc.[13] Both expression refer to the author, source of the original statement. The sentences are not further analysed since it is not relevant to the topic of this thesis. All sentences, however, have evidential quotative meaning, the source of the original sentence is clearly stated in every example.

Hearsay is another type of reported evidentiality. Contrary to quotative, the source of the utterance is not clearly stated, it comes from rumour, general knowledge, stories, legends etc. Polish has a number of devices to indicate hearsay, as illustrated by examples in (4.17):

(4.17)	a.	Podobno	Jacek	i	Kasia	się
		reportedly	Jacek-Nom	and	Kasia-NOM	REFL
		zaręczyli.				
		get engaged-PAST.PRFCTV.3PL				
		'Reportedly, Jacek and Kasia got engaged.'				
	b.	Wyjechał			ponoć	do
		leave-PAST.PRFCTV.3SG.MASC			reportedly	to

[12] Ways of creating reported sentences in Polish are not analysed in detail as it does not pertain to the topic of the this thesis.

[13] For an analysis of different types of complementation of *zdaniem* and *według* see Wiemer (2006: 32-38).

Włoch.
Italy-LOC
'Reportedly, he's left for Italy.'

c. Rzekomo współpracowali z
allegedly cooperate-PAST.IMPRFCTV.3PL with
policją.
police-INST
'Allegedly, they were cooperating with the police.'

d. Niby jest bogaty, ale jeździ
supposed to be-PRES.3SG rich-SG.MASC but drive-PRES.3SG
starym samochodem.
old-SG.INST.MASC car-SG.INSTR
'He is supposed to be rich, but he drives an old car.'

e. Mówi się, że te wybory
say-PRES.3SG REFL that this election-SG.NOM
będą przełomowe.
be-FUT.3PL groundbreaking.
'It is said that this election will be groundbreaking.'

f. Nowy pracownik ma
new-SG.NOM.MASC worker-SG.NOM have-PRES.3SG
być specem od reklamy.
be-INF expert-SG.INST in advertising-SG.GEN
'The new worker is said to be an advertising expert.'

Examples a. – d. show the use of different particles with hearsay meaning. *Podobno* (in a.) and *ponoć* (in b.) have a similar meaning ('reportedly'), *podobno* is more colloquial as opposed to literary *ponoć*: both indicate that the speaker repeats what someone else have said without indicating who that someone was. The hearsay denotation is present in the case of *rzekomo* ('allegedly') and *niby* ('supposed to'), these two particles are different from *podobno* and *ponoć* in that, apart from reporting what others have said, they also present the speaker's attitude towards the proposition: the speaker shows a certain amount of doubt, distances himself/herself from the reported proposition

(Wiemar, 2006). Sentence e., on the other hand, is an example of reported speech without indicating the exact source of information. Here the superordinate clause *mówi się* ('it is said') is followed by a *że*-clause ('that'-clause). The final example in (4.17) shows the use of modal verb *mieć* ('be said to…') as a hearsay devise. *Mieć* has many different meanings: apart from meanings associated with possession (like English *have*), it may also be used to denote command, presumption, to indicate that something should have been done in the past (but was not necessarily done), or (as in the example above) to show that the speaker considers doubtful the proposition presented in a sentence. Sentence f., then, can be interpreted as: 'I have heard that the new worker is an advertising expert, but I am not sure of that'.

4.3. EVIDENTIALITY IN POLISH - CONCLUSIONS

Since it does not have grammaticalised evidential markers, evidentiality in Polish is expressed via various lexical items. The most obvious are Polish perception verbs used not only to indicate sensory evidentiality, but also inferred or reported evidentiality. Polish perception verbs can be divided into different types: dynamic, stative (also with subject as a perceiver or percept) and predicative verbs. Predicative verbs do not occur in English, they are historically related to stative subject-perceiver verbs in Polish, however occur only in a defective, non-inflectional, infinitival form. Evidentiality in Polish, as well as in English, can be found in a variety of other (apart from perception verbs) lexical items and expressions, such as adverbs, particles, modal verbs, prepositions etc. Table 4: "Evidentiality in Polish" summarises different lexical items presented in this chapter that have evidential meanings. Each type of evidentiality can be represented by various lexical items: the table outlines these representations.

Table 4: Evidentiality in Polish.

<table>
<tr><th colspan="2">Evidentiality Type</th><th>Representations in Polish</th></tr>
<tr><td rowspan="5">Direct</td><td>Visual</td><td rowspan="5">1. subject-perceiver verbs:
- imperfective: widzieć,słyszeć, czuć (first person subject; noun phrase complementation; followed by a jak-clause, że-clause with perfective verb; że-clause with imperfective verb)
- perfective: zobaczyć, usłyszeć, poczuć (first person subject; noun phrase complementation; followed by a że-clause with perfective verb; że-clause with imperfective verb)
2. predicative verbs: widać, słychać, czuć (noun phrase complementation)</td></tr>
<tr><td>Auditory</td></tr>
<tr><td>Tactile</td></tr>
<tr><td>Olfactory</td></tr>
<tr><td>Gustatory</td></tr>
</table>

Evidentiality Type			Representations in Polish
Indirect	Inferred	Deductive	1. subject-perceiver verbs: - imperfective: *widzieć,słyszeć, czuć* (followed by a *że*-clause with perfective verb) - perfective: *zobaczyć, usłyszeć, poczuć* (followed by a *że*-clause with perfective verb) 2. subject-percept verbs: *wyglądać, brzmieć, smakować, pachnieć* (followed by and an adverb; followed by *jak* + noun phrase; a finie *jakby*-clause) 3. predicative verbs: *widać, słychać, czuć* (followed by a finite *że*-clause) 4. phrase być w dotyku 5. particie *widocznie* 6. adverb *wyraźnie* 7. expressions zdawać się, wydawać się 8. modal verb *musieć*
		Assumptive	1. verb *być* in the future (modal meaning) 2. modal verb *musieć* 3. modal particles *może, pewnie* 4. modal adverb *prawdopodobnie*
	Reported	Quotative	1. subject-perceiver verbs: - perfective: *widzieć,słyszeć, czuć* (third person subject) - imperfective: *zobaczyć, usłyszeć, poczuć* (third person subject) 2. subject-percept verbs: *wyglądać, brzmieć, smakować, pachnieć* and phrase *być w dotyku* (in the past tense) 3. predicative verbs: *widać, słychać, czuć* (noun phrase complementation) 4. reported speech (reference to concrete source of evidence) 5. expression *czyimś zdaniem* 6. preposition *według*
		Hearsay	1. particles podobno, ponoć, rzekomo, niby 2. expression *mówi się* 3. modal verb *mieć*

Perception verbs are used to mark different types of evidentiality for English and Polish. Dynamic verbs do not indicate the source of evidence, therefore are not analysed here. Polish has different lexical representations for each type of perception for subject-percept verbs (with the exception of phrase *być w dotyku* ('be to the touch') to supply the missing verb for tactile perception). Subject-perceiver verbs have different representations for visual (imperfective *widzieć* and perfective *zobaczyć*) and auditory (imperfective *słyszeć* and perfective *usłyszeć*) perception and the same verb for tactile, gustatory and olfactory perception (imperfective *czuć* and perfective *poczuć*). Similarly, predicative verbs have different verbs for seeing (*widać*) and hearing (*słychać*) and the same for the remaining three types of perception (*czuć*).

Subject-perceiver perception verbs with first person subject carry the meaning of direct evidentiality. Polish subject-perceiver verbs occur in imperfective and perfective

aspect. English does not differentiate verbal aspects, sentences with subject-perceiver verbs in the progressive has a corresponding meaning to sentences with perfective verbs in Polish: but both refer to an event that is not stative, with reference put on the duration. A simple noun phrase complementation occurs in both English and Polish with subject-perceiver verbs. Polish, contrary to English which has both finite and non-finite complementation, has only finite complements of subject-perceiver verbs: *jak*-clause (only for imperfective verbs) and *że*- clauses with imperfective verbs. Direct evidentiality can also be indicated by predicative verbs in Polish. Predicative verbs derive from the same verbs as subject-perceiver verbs, it is not surprising to see that they carry similar meanings. Contrary to subject-perceiver verbs, predicative verbs are subjectless, therefore the interpretation of meaning is highly context-dependent. Polish subject-perceiver verbs are followed by *że*- clauses with perfective verbs. Quotative senses can be found in sentences with subject-perceiver verbs with third person singular subject.

Polish and English stative subject-percept verbs can be have deductive and reported readings. The meaning depends on the tense used in a sentence. If a sentence is in the present, the verbs are usually interpreted as having deductive meaning. Past tense, on the other hand, can indicate either a deduction in the past or quotative. Subject-percept verbs can by complemented by an adverb, by *jak* and a noun phrase or *jakby* followed by a finite clause.

The meaning of predicative verbs is highly context-dependant. When complemented with a noun phrase they carry either direct or quotative evidential meaning. When followed by a finite *że*-clause, predicative verbs have deductive reading.

The analysis of perception verbs in Polish and English reveals that the verbs in both languages are prototypically used to indicate direct sensory evidentiality, they present the speaker's/perceiver's personal experience. Strikingly, the meaning of the verbs in both languages can be extended to illustrate deductive (still based on the perceiver's sensory evidence, but event not perceived as a whole, inferred based on result) or quotative (no reference to sensory evidence at all, restating of someone else's opinion only) evidentiality. Despite obvious differences between the languages (verbal aspect, different complementation patterns that the verbs allow, an extra set of predicative verbs in Polish), perception verbs in both languages can be analysed as carrying similar evidential meanings.

Evidentiality in Polish, however, can be found in a number of other expressions or lexical items, not only perception verbs. Deductive evidentiality may also be expressed by a particle *widocznie* (‘apparently’) or adverb *wyraźnie* (‘evidently’). Expressions *zdawać się* and *wydawać się* (both with similar meaning of ‘seem/appear to’) are also used to say that the speaker infers that something is the case based on perceptual evidence. Assumptive evidence, on the other hand, is solely presented in Polish by modal expressions: particles *pewnie* (‘probably’) and *może* (‘maybe’), modal verb *musieć* (‘must’), or an adverb *prawdopodobnie* (‘probably’). A number of different items can also be used to present reported evidentiality. For quotative, apart from standard ways of creating reported speech, Polish uses expression *czyimś zdaniem* (‘in somebody’s opinion’) or preposition *według* (‘according to’). Hearsay can be indicated by particles *podobno* (‘reportedly’), *ponoć* (‘reportedly’), *rzekomo* (‘allegedly’), *niby* (‘supposed to’), a modal verb *mieć* (‘be said to’), or an expression *mówi się* (‘it is said that’), and certain particles that indicate that the speaker has learnt about the proposition from others, but without indicating from whom exactly. As can be seen from the examples above, different types of evidential meaning can be found in a variety of lexical items in Polish, some of them with other uses as well (modal, for instance).

CHAPTER 5. EVIDENTIALITY AND OTHER GRAMMATICAL CATEGORIES

Evidentials constitutes a separate grammatical category in those languages with grammaticalised morphosyntactic evidential system (Aikhenvald 2004). Other languages, however, have other ways of indicating the source of evidence, be it through various lexical items, modal system, tense particles etc. This chapter looks at various languages: those that have the evidentiality system integrated with other grammatical systems (tense-aspect system for instance), those that have the system of evidential system independent of other systems, and, finally, those that have no system of evidentials at all, but evidentiality can be found in other functional categories (perfect aspect, modal verbs etc.). This chapter also deals with categories that influence evidential interpretation, for instance person or aspect. The relationship between person and evidentiality is discussed first in 5.1., than the correspondence between evidentiality and tense (5.2.) and aspect (5.3.) are analysed. In 5.4., the correlation between clause type (interrogative and imperative clauses) and evidentiality are discussed, while in 5.5., the relationship between negation and evidentiality is briefly described. The choice of grammatical categories discussed in this chapter is made based on what categories influence evidentiality types in English and Polish mostly.

5.1. EVIDENTIALITY AND PERSON

The relationship between person and evidentiality is often discussed in the literature (Aikhenvald 2004, Rooryck 2001b, DeHaan 2005). DeHaan (2005: 6-7) notices that first person agrees with direct evidentiality rather than with indirect one due to deixis: “(t)he reason is of course that it is very hard to have only indirect evidence for actions in which the speaker himself was the main participant”. Evidentials present the source of evidence perceived by the perceiver. It is important, however, to establish who the perceiver is. Is it the subject or object of the sentence? Is it the speaker or listener? The answer, of course, depends on the type of evidential (direct, inferred, reported etc.). The answer seems quite straightforward in the case of direct evidentials: the perceiver of the action or event is the speaker of the sentence. Example (5.1) from Wanka Quechua illustrates the use of first person with a direct evidential (Aikhenvald 2004: 159):

(5.1) ñawi-i-wan-mi lika-la-a
eye-1P-with-DIR.EV see-PAST-1P
'I saw [them] with my own eyes'

The speaker of the above sentence is at the same time the perceiver. The sentence simply indicates that the speaker saw someone. First person may also be used with inferred evidentials, as in example below from Bora (Aikhenvald 2004: 164):

(5.2) ó áxʈʰɯmɨ-ʔ tsʰà-há-ʔha^{H}-a^{L} hà:
I see-(t) that-(shelter)—INFR-REMOTE.PAST shelter
aíŋ-:ḍɛ́-hà
burn-sIn-(shelter)
'I saw a burned house (one that had burned before I saw it)'

The speaker of the above sentence, infers based on personal sensory perception that the house burnt. Similarly to (5.1), (5.2) has no overtones of doubt or evaluation, it is purely a statement of what the speaker has inferred based on what he/she saw. Aikhenvald (2004: 220-239) notices that non-firsthand evidentials in smaller systems and non-visual evidentials usually denote an action that is unintentional, non-volitional, uncontrolled by the speaker. Firsthand and visual evidentials, on the other hand, refer to action that the speaker has control over. Sentences in (5.3) illustrate the difference from Jarawara (Dixon 2003: 170):

(5.3) a. o-hano-hara o-ke
1SG.S—be drunk-IMM.P.FIRSTHAND-f 1SG-DECL.f
'I got drunk (deliberately)'
b. o-hano-hani o-ke
1SG.S—be drunk-IMM.P.NONFIRSTHAND-f 1SG-DECL.f
'I got drunk (and don't recall it)'

Both sentences from (5.3) refer to the same event, the choice of evidential determines the interpretation: the firsthand evidential *hara* in example a. denotes full awareness on the speaker's part (I knew what I was doing, I remember it well), whereas the non-firsthand evidential *hani* in b. indicates that the speaker does not remember getting drunk (I woke up with a hangover, hence I infer I got drunk last night).

As demonstrated in Chapter 3, English and Polish use perception verbs to indicate sensory evidentiality, specifically subject-perceiver perception verbs. The use of first person in sentences with these verbs typically indicates that the speaker is simultaneously the perceiver. The change of person changes evidential meaning encoded in the sentence. Examples (5.4) illustrate the change in English:

(5.4) a. I saw the Blue Man Group last night.

b. Monica saw the Blue Man Group last night.

Sentence a. above indicates that the speaker is the perceiver, hence direct visual evidentiality reading is implied. Example b., on the other hand, can only be interpreted as an instance of reported evidentiality since the speaker is not the perceiver, the subject of the sentence (in third person) is in this case the perceiver, while the speaker only quotes what he/she heard. A similar phenomenon occurs with subject-perceiver verbs in Polish:

(5.5) a. Widziałem koncert
see-PAST.IMPRFCTV.1SG.MASC concert-SG.ACC
Ill niño w zeszły weekend.
Ill niño-ACC PREP last-SG.INSTR.MASC weekend-SG.INSTR
'I saw the ill niño concert last weekend'

b. Piotrek widział koncert
Piotrek-NOM see-PAST.IMPRFCTV.3SG.MASC concert-SG.ACC
Ill niño w zeszły weekend.
Ill niño-ACC PREP last-SG.INSTR.MASC weekend-SG.INSTR
'Piotrek saw the ill niño concert last weekend'

In sentence a. above, similarly to (5.4) a., the subject is in the first person, the speaker has a personal sensory perception of the event, contrary to (5.5) b., in which the third person subject implies reported reading: the speaker is not the perceiver of the original event, the subject of the sentence is the original perceiver, the speaker only reports the subject's perception.

A different situation can be observed with subject-percept verbs in English and Polish:

(5.6) a. Paul looks tired.

b. Paweł wygląda na zmęczonego.
Paweł-NOM look-PRES-3SG PREP tired-SG.ACC.MASC
'Paweł looks tired'

Both sentences describe the subject's condition (being tired). Here the perceiver is not the same as the speaker. The perceiver of the event is not evident, the subject of the sentence is *de facto* the object of perception. The speaker is the implied perceiver of the event. The sentences are instances of deductive evidentiality: the speaker (perceiver) presents his/her evaluation of the event based on sensory evidence).

Polish predicative verbs constitute the last type of perception verbs. They are referred to by Kibort (2006: 302) as "truly subjectless predicates", example presented below:

(5.7) Widać było całe
see-PRED.V be- PAST.PRFCTV.3SG.NEUT whole-SG-ACC-NEUT
miasto.
city/town-SG.ACC
'You/One could see the whole city/town'

Predicative verbs do not take subjects, therefore the correct evidential interpretation is only possible to establish depending on context. When context indicates direct evidential reading, the speaker is the perceiver of the event or situation (he/she could see the city/town), when interpreted as quotative, the speaker is not the original perceiver, but a

reporter of someone else's perception. Examples in (5.4) - (5.7) relate to visual perception only, but similar analysis is valid for other types of perception as well.

In the case of reported evidentiality, the subject is typically in the third person:

(5.8) a. ba ‘í’í’-di na-mɛ
REP there-OBL 3SGSTAT.PREF-gp:PAST3
‘They say he left there’

b. ‘o-he: gi-ba na-tú
1SGSTAT.PREF-sick that-REP 3SGSTAT.PREF-say
‘”I’m sick”, he said’

c. na-he: gi na-tú
3SGSTAT.PREF-sick that 3SGSTAT.PREF-say
‘He said that he is sick’

All examples in (5.8) relate to reported evidentiality (Aikhenvald 2004: 134; after Kroskrity 1993: 145). Sentence a. is an example from Tewa. Here, the evidential marker *ba* indicates that the speaker learnt about the proposition from someone else, it is not explicitly stated, however, who the information was obtained from exactly. If, however, the speaker knows and wants to share the information about the exact authorship of the information, he/she may choose to use direct speech (as in b.) or indirect speech (as in c.). Each of the examples above, despite the type of sentence, uses third person to present information obtained from a different source, not personally perceived. English and Polish also have ways of indicating that the information comes from someone else:

(5.9) a. Tom said that Anna cried.

b. Tomek powiedział, że
Tomek-NOM say-PAST.PERFCTV.3SG.MASC that
Anna płakała.
Anna-NOM cry-PAST.PRFCTV.3SG.FEM
‘Tomek said that Anna cried’

c. Allegedly, Anna cried.

d. Rzekomo Anna płakała.

allegedly Anna-NOM cry-PAST.PRFCTV.3SG.FEM

'Allegedly, Anna cried'

Sentences a. and b. are instances of quotative evidentiality. Both sentences use reported speech and the subject is in third person. Sentences c. and d., on the other hand, exemplify hearsay. Here, the exact source of information is not known, but the subject is still third person. Sentimes, however, reported evidentials occur with first person. In such a case, the sentence has an overtone of doubt, irony or surprise (Aikhenvald 2004: 225-228). Sentences in (5.10) illustrate the use of first person with reported evidentials:

(5.10) a. aš pa-raš-ęs nauj-ą
I:NOM PERF-write-ACT.PAST.NOM.SG.MASC=REP new-ACC
knyg-ą!?
book-ACC
'It seems as if I have written a new book!?'

b. yɨt utî-apa'do
I cry-REC.P.REP.NONTHIRD.P
'They say that I cried (I do not remember because I was drunk)'

c. Apparently, I talked to Susan last night.

d. Ponoć kłóciłem się z
reportedly argue- PAST.IMPRFCTV.3SG.MASC REFL with
bramkarzem w klubie wczoraj
bouncer-SG.INSTR in club-SG.LOC yesterday
w nocy.
PREP night-SG.LOC
'Reportedly I argued with a/the bouncer at a/the club last night'

Sentence a. from Lithuanian (Aikhenvald 2004: 225; after Gronemeyer 1997: 1990) has an overtone of surprise and disbelief. Sentence b. from Tucano (Aikhenvald 2004: 226; after Ramirez 199: vol. I: 142), on the other hand, implies that the speaker does not remember crying, he/she learnt about the event from someone else. Similar meaning can be observed in English (sentence c.) and Polish (sentence d.): the speaker does not

remember the events he/she is talking about, he/she obtained the information through report from someone else. The sentences may imply disbelief of surprise, but do not have to, they may be straightforward report of information learnt from others.

5.2. EVIDENTIALITY AND TENSE

The correlation between tense and evidentials is a difficult topic to discuss as different languages tend to behave in a completely different way (Aikhenvald 2004: 102-103). Aikhenvald (2004: 261-267) differentiates three types of languages: those that have a tense system independent of evidentiality system, languages that differentiate evidentials across all tenses and languages that differentiate evidentials across only some tenses. Depending on a language, an evidential marker can occur with a present, past or future tense depending on the type of evidentiality. Tariana, for instance, has five evidential choices: visual, non-visual, inferred, assumed and reported (Aikhenvald 2004: 265). All five evidentials can occur in the past tense, but inferred and assumed do not occur in the present. The reason that inferred and assumed evidentials do not occur in the present is that the event must have taken place before the time of the utterance. There are no evidentials occurring in the future in Tariana.

Direct evidentials may refer to the present and past. Sanuma has a number of visual evidentials depending on when the event was witnessed, as illustrated below (De Haan; unpublished; after Borgman 1990):

(5.11) a. ĩ na töpö ku kule
REL like 3PL say PRES:WIT
'That is what they are saying.'

b. ipa sai ha hama töpö hasu-ki ke.
my house by visitor 3PL pass.by-FOC IMM.PAST:WIT
'The visitors passed by my house.'

Example a. refers to an event witnessed at the moment of speaking, therefore a present visual evidential *kule* is used. In b. the event took place prior to the moment of speaking, hence the use of past evidential *ke*.

As has been mentioned above, some languages (Tariana) do not use inferred evidentials in the present. Yukaghir, however, can use the same inferred evidential in the present and in the past (Maslova 2003: 222-224):

(5.12) a. [...] aji:-l'el-u-m, šar qoha-s'[…]
shoot-NONFIRSTH-O-TR:3 something burst+FIRSTH-INTR:3SG
'…(then) he shot (I infer), something burst (I heard)…'

b. ataq-un kun'il-get ningo: i:die-l'el-d'i:l'i
two-ATTR ten-ABL lots.of catch-NONFIRSTH-INTR:1PL
'It turned out (later) that we had caught more than twenty (fish)'

Both examples in (5.12) use the same nonfirsthand (inferential) evidential marker *l'el*, the difference in the use of the marker lies in the time of inference. In sentence a., the realisation is simultaneous with the event (the speaker hears something burst and immediately infers it must have been a shot). In sentence b., on the other hand, the speaker realised how many fish were caught some time after the event.

Languages like Tuyuca or Tucano have no present reported evidentials. Tariana, on the other hand, has three evidential suffixes for three tenses (Aikhenvald 2004: 100-101):

(5.13) a. Tiago di-ñami-pida
Tiago 3SGNF-die-PRES.REP
'Tiago has died (the speaker has just learnt it)'

b. Tiago di-ñami-pidaka
Tiago 3SGNF-die-REC.P.REP
'Tiago has died (the speaker learnt about it the previous day)'

c. di-ñami-pidana
3SGNF-die-REM.P.REP
'He died (the speaker learnt about it a long time ago)'

Sentences above illustrate the correlation between the time of the event (Tiago's death) and the time when the information was acquired by the speaker: if the speaker has just learnt about the event, present reported evidential *pida* is used, for information acquired

recently, recent past reorted evidential suffix *pidaka* is used, while for events the speaker knows about for a long time, remote past reported evidential *pidana* is used.

Aikhenvald (2004: 261) notices the special interrelation between the future and evidentiality. She says that "(i)t is far from uncommon for a language not to distinguish evidentiality in the future at all", or for it to be a lot rarer than in the case of other tenses. This is due to the fact that direct evidentials, for instance, cannot refer to an event in the future that has not happened yet. Evidentials in the future may develop other meanings as in (5.14) below:

(5.14) agulpis-si ya'a ma'a-shrayki-m
hitting-even I beat-1>2P.FUT-DIR.EV
'I'll even beat it [the truth] out of you'

The use of direct evidential suffix *–m* in the above sentence implies that determination on behalf of the speaker to do something in the future (Aikhenvald 2004: 26).

In English and Polish the relationship between tense and evidentiality type depends on the type of evidentiality itself, the type of lexical item used in a sentence and the argument structure. Direct evidentiality is expressed by perception verbs. Subject-perceiver perception verbs with first person subject can relate to both present and past direct sensory evidentiality:

(5.15) a. I see the moon.
b. Widzę księżyc.
see-PRES.IMPRFCTV.1SG moon-SG.ACC
'I see the moon'
c. I saw the moon.
d. Widziałem księżyc.
see-PAST.IMPRFCTV.1SG.MASC moon-SG.ACC
'I saw the moon'

Above sentences are corresponding examples from English and Polish. Sentences a. and b. are in the present, sentences c. and d. in the past. All sentences have a first person

subject, hence can be interpreted as instances of direct evidentiality. A change of subject into third person influences evidential meaning encoded in the subject-perceiver perception verbs:

(5.16) a. He sees the moon.

b. Widzi księżyc.
see-PRES.IMPRFCTV.3SG moon-SG.ACC
'He sees the moon'

c. He saw the moon.

d. Widział księżyc.
see-PAST.IMPRFCTV.3SG.MASC moon-SG.ACC
'He saw the moon'

The above sentences have the meaning of reported evidentiality, despite the tense (present in a. and b., past in c. and d.). Similar shift of meaning can be observed in the case of subject-perceiver verbs:

(5.17) a. He looks tired.

b. Wygląda na zmęczonego.
look-PRES.3SG PREP tired-SG.ACC.MASC
'He looks tired'

c. He looked tired.

d. Wyglądał na zmęczonego.
look-PAST.3SG PREP tired-SG.ACC.MASC
'He looked tired'

Sentences a. and b. have a deductive reading: the speaker infers that the percept is tired at the moment of speaking. Sentences c. and d. are ambiguous between inferred and reported readings: the sentences may be instances of past deduction or the speaker may quote what he/she learnt from someone else.

Apart from subject-percept and subject-perceiver verbs, Polish also has predicative verbs. These verbs cannot occur in the past as they are defective infinitival forms, they occur only in the present.

With relation to other lexical items and indirect evidentiality types in English and Polish, the correlation between tense and evidentiality type largely depends on the lexical item used in a sentence. Deductive evidentiality typically relates to past, occasionally present, events, since the speaker cannot infer that something is the case based on an event that has not occurred yet. Assumptive evidentiality generally refers to either the present or the past, but there are instances referring to the future: the speaker can make assumptions not only about past or present events, but about the future as well:

(5.18) a. She will know what to do, she always does.

b.

Będzie	wiedziała	co	zrobić,
be-FUT.3SG	know-PAST.PART.3SG.FEM	what	do-PRFCTV.INF
zawsze	wie.		
always	know-PRES.IMPRFCTV.3SG		

'She will know what to do, she always does'

The speaker of the above sentences assumes, based on his/her knowledge, that the situation described will take place. In a. the modal verb *will* for English is used, while in b. the Polish verb *być* with modal meaning referring to the future is used.

Sentences with reported evidentiality, especially quotative, meaning in Polish and English typically relate to the past since we usually report what others have already said. There are instances when quotative could be used in sentences with the present tense:

(5.19) a. Ann says she's going to Paris next week.

b.

Anna	mówi,	że	jedzie	do
Anna-NOM	say-PRES.3SG	that	go-PRES.3SG	to
Paryża	w	przyszłym	tygodniu.	
Paris-SG.GEN	PREP	next-SG.LOC	week-SG.LOC	

'Anna says that she is going to Paris next week'

The matrix clause verb is in the present tense, it does not, however, mean that the 'saying' in a. and b. and the time of uttering the sentences is simultaneous. The 'saying' actually happened in the past near the time of the utterance. Therefore, it could be said, that even though there are instances when quotative sentences can be in the present tense, the time reference is not present, quotative always refers to the past event. Hearsay, on the other hand, can genuinely refer to the present:

(5.20) a. Apparently, they are in Paris now.

b. Podobno są teraz w Paryżu.
apparently be-PRES.3PL now in Paris-SG.LOC
'Apparently they are in Paris now'

The present tense used in the above sentences coincides with the time of speaking. The difference between quotative evidentiality and hearsay in English and Polish is that quotative refers to what someone else have already said, therefore it usually occurs with the past. Hearsay, on the other hand, can relate to either past or present events or situations.

5.3. EVIDENTIALITY AND ASPECT

The relationship between evidentiality and aspect also depends on a language. Some languages differentiate evidentiality types within their aspectual system. Tibetan, for instance, distinguishes different types of evidentiality in the perfective (DeLancey 2001: 371):

(5.21) a. blo=bzang-gis thang=kha bkal-song
P.N.-ERG thangka hang-PERF/DIRECT
'Lobsang hung up a thangka (religious painting)' (direct perception)

b. blo=bzang-gis thang=kha bkal-bzhag
P.N.-ERG thangka hang-PERF/INFERENTIAL
'*idem.*' (inference from direct knowledge of a subsequent state, e.g. the speaker sees firsthand that the thangka has been hung)

c. blo=bzang-gis thang=kha bkal-pa red
P.N.-ERG thangka hang-PERF/INDIRECT
'*idem.*' (hearsay, inference, or general knowledge)

Sentence a. implies that the information was obtained via direct perception, b. – direct perception of a resultant state of the event, while c. – indirectly. Perfective in Tibetan can be used with different types of evidentiality. Georgian, on the other hand, uses perfect only in the inferential sense (Aikhenvald 2004: 113; after Hewitt 1995: 259):

(5.22) varsken-s ianvr-is rva-s p'irvel-ad
Varsken-DAT January-GEN 8-DAT first-ADV
(ø-)u-c'am-eb-i-a šušanik'-i
(he-)ov-torture-TS-PERF-her Shushanik'-NOM
'Varsken apparently first tortured Shushanik in 8th January'

The above sentence means that the speaker has learnt about the event form someone else, therefore can be interpreted as an example of hearsay. This, however, is not the only use of the perfect. Perfect aspect can be used for many situations, in some uses it develops evidential reading, as in English in (5.23) below:

(5.23) You've broken my favourite vase! Look at the pieces of glass everywhere!

The speaker of the above sentence did not witness the whole event, but inferred what has happened based on the result – pieces of glass scattered everywhere. This use of the perfect and its correlation with inferred evidentiality is explained by DeLancey (1995: 378):

> "The association between a perfect construction and an inferential, which marks a proposition as known to the speaker through direct perception of the result of an event, is fairly obvious (…). The perfect describes an event as in the past relative to the moment of speech, but nevertheless relevant in the present, *i.e.*, most typically an event which is finished but which has lasting consequences perceptible at the time of speech."

The above description of the perfect closely resembles the semantics of deductive evidentiality: in both cases, the speaker infers that something has happened via perception of the present result.

Apart from perfect, English also has a progressive aspect. Not all verbs in English can occur in the progressive, modal verbs (with inferential meanings), for instance, cannot occur in the progressive. Subject-perceiver verbs have a change of meaning when in the progressive from stative to temporary, but still the verbs refer to direct sensory perception. Sometimes, the meaning may change completely from direct perception into metaphorical[14]. Subject-percept verbs, on the other hand, when in the progressive do not have evidential meanings (Gisborne 1998: 14).

Most Polish verbs occur either in the perfective or imperfective. The influence of the aspect on evidential meanings encoded in the Polish perception verbs was discussed at length in chapter 4.2.1. Only Polish subject-perceiver verbs retain the reference to sensory perception when used in the imperfective. Subject-percept verbs change their meaning completely into non-evidential when in the imperfective. Predicative verbs, as defective verbs, have no perfective/imperfective distinction.

5.4. EVIDENTIALS IN QUESTIONS AND COMMANDS

Sentences analysed so far are examples of declarative clauses. For this reason, declarative clauses are not discussed in this chapter. Instead, I look at questions, commands and dependent clauses.

As with any other grammatical category, the correlation between evidentiality and clause type depends on a language, but "(i)n an overwhelming majority of languages more evidential choices are available in statements than in any other clause type" (Aikhenvald 2004: 242). Some languages have the same evidentials in statements and questions, other languages may have fewer evidential choices in questions, or the evidentials used in questions can have a different meaning, like in (5.24) below from Wanka Quechua (Aikhenvald 2004:247; after Floyd 199: 113):

[14] See examples (3.12) – (3.13) in Chapter 3.

(5.24) Father speaking:

may-chruu-chra	gasta-y-pa	paawa-alu-n?
where-LOC-INFR	spend-NOMN-GEN	finish-ASP-3P

'I wonder where he spent it all? (lit. Where did he spend it-INFERRED)'

The inferred evidential *chra* used in the above question has a different meaning: the question is not a genuine question about what happened to the money, it is more of a rhetorical question, not requiring the answer.

Languages also differ in terms of whose information source is being questioned: the speaker's, the addressee's or third party's, as illustrated below:

(5.25) a.

kiˑyáˑ=tʼa	ʔéč-inkʼe
who=INTER	sneeze-NONVIS

'Who sneezed? (I heard, but don't know who sneezed)'

b.

kwana-nihka	nawiki	na:ka?
who-REC.P.VIS.INTER	people	3PL+arrive

'What kind of people have been there? (VIS: the addressee saw them)'

c.

Ngana-ngku	naganta	pakarnu?
who-ERG	REP	hit+PAST

'Who does she say hit him?'

Sentence a. from Eastern Pomo asks about the information source of the speaker: he/she heard someone sneezing, but does not know who that was (McLendon 2003: 114-6). Sentence b. from Tariana, on the other hand, asks about the information source of the addressee: the use of visual evidential *nihka* implies that the speaker knows that the addressee saw the event, therefore can provide the answer to the question (Aikhenvald 2004: 245). The use of reported evidential *nganta* in c. from Warlpiri implies that that the speaker asks the addressee about information from a third party: the woman claims that someone hit him, the speaker wants to know who that was and expects the addressee to have that information (Aikhenvald 2004: 248; after Laughren 1982:140).

It is difficult to find unequivocal examples of questions in Polish or English that would ask about the information source of the speaker. If one questions his/her perception, the question would have the meaning of disbelief, not trusting oneself. In the case of indirect evidentiality it is only possible to ask about addressee's or third party's information source:

(5.26) a. Whom did you see yesterday?

b. Kogo wczoraj widziałeś?
who-ACC yesterday see-PAST.IMPRFCTV.2SG.MASC
'Whom did you see yesterday?'

c. What did she tell you?

d. Co ona ci powiedziała?
what she-NOM you-DAT tell-PAST.PRFCTV.3SG.FEM
'What did she tell you?'

Sentence a. from English and b. from Polish ask about the addressee's information source: the addressee saw someone, the speaker enquires who that person was. The speaker of sentences c. and d., on the other hand, asks about more information coming from a third party.

Other type of clauses to be discussed in this chapter are commands. Aikhenvald (2004: 250) notices that languages do not typically use evidentials in commands. Some languages, however, "have a secondhand imperative meaning 'do something on someone else's order' marked differently from evidentiality in declarative clauses" as in the case of Tucano below (Aikhenvald 2004: 250; quotations used by the author):

(5.27) ãyu-áto
good-REP.IMPV
'Let them stay well (on someone else's order)!'

The command in the above example does not come from the speaker, but from someone else, the speaker only reports what someone else ordered to the addressee (hence the use of reported imperative evidential *áto*).

Imperative clauses with direct evidential meaning on English and Polish are not possible to create. Subject-perceiver verbs denote involuntary sensory perception on behalf of the speaker, it is not possible to 'force' someone to suddenly start seeing, hearing etc. Similarly, with inferred evidentiality the speaker comes to a conclusion not deliberately, ordered by someone else. Reported evidentiality can only occur in declarative sentences, too. The only way to report command in English or Polish is in the embedded clause in the reported speech:

(5.28)	a.	She told us to leave.		
	b.	Kazała	nam	wyjść.
		tell-PAST.PRFCTV.3SG.FEM	we-DAT	leave-INF
		'She told us to leave'		

The above sentences, however, are not 'true' commands, the speaker does not order the addressee to leave on behalf of someone else, the speaker merely reports someone else's command in a complex declarative sentence. It is, perhaps, possible that a speaker can use an imperative clause telling the addressee to do something, without mentioning from whom the order comes. Such a situation, however, would be too confusing, the addressee would probably interpret the command as coming from the speaker. Should the speaker clarify from whom the order comes exactly, he/she would have to use reported speech (direct or indirect), that is a declarative sentence.

To sum up, evidentials rarely occur in questions, and even rarer in commands across languages. Evidentials used in questions may change the meaning. Questions can ask about three types of information source: the speaker's (least common), the addressee's or third party's (mostly reported evidentials). The most typical type of evidentials used in commands are 'secondhand imperative', that is commands given on someone else's behalf (Aikhenvald 2004: 250-3).

5.5. EVIDENTIALITY AND NEGATION

Languages may use the same evidentials in positive and negative clauses. Other languages use different evidentials, like Tariana (Aikhenvald 2004: 167):

(5.29) ne:ri halite ma-ka-kade-mhana nu-yã-ka
deer white+NCL:ANIM NEG-see-NEG-REM.P.NONVIS1SG-stay-DECL
nuha ne:ri irite-mia-na nu-ka
I deer red+NCL:ANIM-ONLY-REM.P.VIS 1SG-see
nu-yã-ka nuha
1SG-stay-DECL I
'I have never seen a white deer, I have only seen red deer'

Non-visual evidential *mhana* is used to indicate that the speaker did not see a white deer, while for a red deer the speaker has seen, visual evidential *na* is used.

The non-visual evidential in (5.29) above is negated, it is more common for the evidential to be within the scope of negation. Negation of the information source is rare (Aikhenvald 2004: 256). Negation of evidentiality, not the information source, is also typical in English and Polish:

(5.30) a. I didn't see what happened.
b. Nie widziałam co się
not-PART see-PAST.IMPRFCTV.1SG.FEM what REFL
stało.
happen-PAST.PRFCTV.NEUT
'I didn't see what happened'

Both sentences above negate the 'seeing', not the information source (in this case the speaker).

5.6. EVIDENTIALITY AND OTHER GRAMMATICAL CATEGORIES - CONCLUSIONS

The analysis of evidentiality and its correspondence with other grammatical categories proves difficult because languages differ when it comes to the relation between evidentiality and other grammatical categories. Depending on a language, the same or different markers may be used to indicate evidentiality and other grammatical categories (like tense or aspect). Sometimes evidential meanings are observable only in the

evidential paradigm, and are neutralised in other categories. Sometimes, especially in languages which have no grammaticalised evidentials like English or Polish, a grammatical category (perfect, for instance) can have evidential and epistemic overtones.

The interaction between evidentiality type and person is apparent. First person occurs with direct evidentiality due to personal experience of the action or event. Similarly, inferred evidentiality usually occurs with first person. Even though deductive evidentiality differs from direct one in that the speaker has no direct perception of the event, but rather bases his/her observations on the end result, still it is the 'internal' observation, deduction of the speaker that leads him/her to a certain conclusion: hence the use of first person. Contrary to direct and inferred evidentiality, reported evidentials usually take third person subjects since the speaker refers what others have said. The use of first person with reported evidentials implies that the speaker does not remember the event, does not believe or is surprised by what he/she is saying.

The relationship between evidentiality and tense also depends on a language: evidentiality may be fully, partially, or not at all incorporated with the tense system. The most evidential choices occur in the past, the least in the future. This coincides with the nature of evidentials, especially indirect evidentials that refer to past events. Evidentials rarely occur in the future since it is difficult to describe sensory perception, for instance, that has not yet occurred. The time reference of an evidential may correspond with the time of an event (like a direct evidential referring to an event happening at the moment of an utterance) or the two may be different (reported evidential – the time of the original utterance is in the past, while the time of speaking is in the present).

Languages also code evidentiality differently depending on aspect. Perfective aspect is mostly analysed since it acquires the meaning of inferred deductive evidential, because the speaker describes an event based only on the perception of the result, not a whole event. Progressive in English and imperfective in Polish also influence the evidential meaning encoded in the perception verbs: with subject-percept verbs the change of aspect completely changes the meaning of the verb into non-evidential, while with subject-perceiver verbs, the change of Aktionsart influences the meaning, but the verbs can still refer to direct perception.

Not surprisingly, the interaction between evidentiality and negation depends on a language, therefore it is possible to find languages that use the same or different

evidentials in positive and negative clauses. Evidentiality is usually within the scope of negation: it is the evidentiality that is most typically negated, not the information source.

CHAPTER 6. EVIDENTIALITY AND EPISTEMIC MODALITY.

Linguists disagree as to the relation between evidentiality and epistemic modality. The issue is whether evidentiality and epistemic modality should be treated as two separate semantic categories, or whether one should be treated as a sub-type of the other, or maybe there is an overlap between the two.

Dendale & Tasmowski (2001: 341-2, italics in original text) differentiate three types of relation between evidentiality and epistemic modality: "*disjunction* (where they are conceptually distinguished from each other), *inclusion* (where one is regarded as falling within the semantic scope of the other), and *overlap* (where they partly intersect)".

Inclusion relation is presented by Chafe (1986), for instance, who claims that evidentiality deals not only with presenting the source of evidence, but also with the speaker's judgment of the truth of the proposition (wide account of evidentiality). Chafe's analysis is based on English, which uses modal verbs, adverbs etc. to indicate the source of evidence, hence the theory that evidentiality and epistemic modality overlap. Aikhenvald (2004), on the other hand, presents the disjunction relation. She strongly advocates against treating evidentiality as a part of epistemic modality. She describes evidentiality as a grammatical category independent of any type of modality, concerned with the source of evidence only. Her analysis is based on languages with a grammaticalised morphosyntactic set of evidentials.

The approach undertaken in this thesis is that of overlap and is based on Palmer's account of evidentiality and epistemic modality (as previously described in chapter 2). Palmer (2001: 8) treats epistemic modality and evidentiality as two types of propositional modality: "(t)he essential difference between these two types is (…) that with epistemic modality speakers express their judgments about the factual status of the proposition, whereas with evidential modality they indicate the evidence they have for its factual status". Palmer's account of evidential modality as part of propositional modality, alongside epistemic modality raises two questions. First, what is the relationship between evidentiality and epistemic modality in different languages, *i.e.* do the two categories always overlap, or are there cases when one is completely separate from the other? Second, since evidentiality and modality are related, does evidentiality fall within the proposition (like modality) or not?

This chapter addresses the above questions. Chapter 2 of this thesis presented a categorisation of semantic meanings of evidentials across languages. Examples given in that chapter included mostly evidentials with no epistemic extensions. Chapters 3 and 4 illustrated evidential strategies in English and Polish, respectively. Both languages have no grammaticalised evidentials, evidentiality can be found in a variety of lexical items, including modal expressions. Sub-chapter 6.1. below illustrates that evidential markers in different languages can have epistemic extensions and shows how epistemic modality and the source of evidence overlap in various words and expressions in English and Polish. The issue of the (non-)propositional level of meaning of evidentials is addressed in 6.2.

6.1. RELATION BETWEEN EVIDENTIALITY AND EPISTEMIC MODALITY IN VARIOUS LANGUAGES

Languages with 'pure' evidential systems have a morphosyntactic system of grammaticalised evidentials. Evidentials in such languages can be used to present only the source of evidence (direct or indirect). This is an obligatory strategy in such languages, like marking tense in English. Sometimes, however, the evidential may show epistemic extensions, such as certainty or doubt (Aikhenvald 2004: 186-193). Example (6.1) from Wanka Quechua, for instance, uses a direct evidential with an epistemic extension of certainty (Aikhenvald 2004: 162-3; after Floyd 1999:69-70):

(6.1)	papaa-kaa-si	mana-m	atipa-n-chu	lula-y-ta
	father-DEF-also	not-DIR.EV	be.able-3P-NEG	do-IMPF-ACC
	'Our parents can't do it either (DIRECT)'			

The above sentence does not mean that the speaker has a direct visual confirmation that his/her parents cannot do something, it means that the speaker is confident that his parents cannot do it.

Palmer analyses inferred (deductive and assumptive) as an overlap between evidentiality and epistemic modality, as a category that pertains to the source of evidence and involves judgment. He denies the claim that deductive and assumptive evidentials

should be treated "as a 'mixed system', one that contains markers of both judgments and evidentials. It would be more reasonable to say that Deductive and Assumptive can be seen as both judgments and evidentials in that the relevant judgments are based upon evidence" (Palmer 2001: 29; quotation marks used by the author). Aikhenvald (2004: 187), on the other hand, notices that inferred evidentials do not necessarily have to have epistemic overtones. In some languages, inferred evidentials are used purely to indicate the source of evidence. There are, however, languages that use inferred evidentials with epistemic extensions. Evidential marker *–mein* in Shipibo-Konibo may imply doubt (Aikhenvald 2004: 55, 176):

(6.2) tso-a-mein i-ti iki
who-ABS-SPECL be-INF AUX
'Who could it be?'

The above question could be asked when, for instance, hearing a knock on the door. In that case, the speaker is uncertain of whom that could be and can only speculate.

Reported evidentials may exhibit epistemic overtones as well, as exemplified below (Valenzuela 2003: 41):

(6.3) Nato oxe-ronki mi-a sueldo nee-n-xon-ai
this moon-REP 2-ABS salary:ABS go.up-TR-BEN-INC
apo-n oin-tan-we!
chief-ERG see-go.do-IMP
'(It is said that) this month the president will raise your salary. Go see it! (I am sure this is not true)'

The above sentence from Shipibo-Konibo uses reported evidential suffix *–ronki* to indicate that the information was obtained from someone else. The speaker, however, does not believe that the information is true, considers the information unreliable.

In languages like English the relationship between evidentiality and epistemic modality is of different type. In languages with grammaticalised evidentials, the evidential markers may develop epistemic extensions in some cases, usually, however, the markers

simply refer to the source of evidence. English does not have grammaticalised evidentials, evidential meanings are encoded in an array of lexical items: perception verbs, modal verbs, adverbs, etc. Different ways of expressing evidentiality in English were presented in chapter 3, some of them have epistemic meanings alongside evidential ones, as illustrated in sentences in (6.4) below:

(6.4) a. Anna looks tired.
b. Anna seems tired.
c. Anna must be tired.
d. Anna will be tired.
e. Anna's obviously tired.
f. Apparently, Anna is tired.

All above examples have the same proposition: Anna is tired. Sentences a. – c. are examples of deductive evidentiality, sentence d. – assumptive evidentiality, sentence e. is ambiguous between deductive and assumptive, while sentence f. is an example of hearsay. Sentence a. uses a subject-percept perception verb followed by an adjective. The sentence implies that the speaker bases his/her deduction on Anna's appearance. The sentence presents subjective speaker's judgment: the speaker judges Anna's condition by her appearance. Other subject-percept verbs (*sound, feel, taste, smell*) have similar meanings (Gisborne 1998).

Seem (and *appear*, not exemplified here, see chapter 3) is very similar in meaning to *look* above. The speaker of example c. presents a subjective attitude towards the proposition: sensory perception (Anna's looks or the sound of her voice) leads the speaker to a conclusion that Anna is tired.

Sentences d. and e. are perfect examples that epistemic modal verbs have evidential meanings. *Must* in d. implies direct source of evidence (most typically visual, but may be auditory as well), while *will* in e. indicates that the evidence is based on reasoning. In both cases, however, the deduction/assumption is highly subjective: it is the speaker who deduces the state of affairs based on his/her sensory perception or assumes that that is the case, because of his/her experience or knowledge.

Example f. shows the use of modal adverb *obviously*. In the case of this sentence, the exact source of evidence is unclear, it could be an example of deductive or assumptive evidentiality, further context is necessary to disambiguate the meaning. In any case, the sentence is also an example of subjective epistemic judgment based on evidence (sensory or reasoning).

Final example g. illustrates the use of hearsay adverb *apparently*. The sentence can be understood that the speaker obtained the information that Anna is tired from someone else, however, the speaker does not believe that it is true ('she may as well be tired as they say, but I'm not sure').

Evidentiality in Polish, similarly to English, can be found in non-grammaticalised lexical items. Evidentiality is present in different words or expressions that also have modal meanings. Epistemic extensions can be found in items with various evidential meanings:

(6.5) a. Anna wygląda ładnie.
Anna-NOM look-PRES-3SG prettily
'Anna looks pretty'

b. Widać, że Anna lubi psy.
see-PRED.V that Anna like-PRES.IMPRFCTV.3SG dog-PL.GEN
'You/One can tell that Anna likes dogs'

c. Widocznie w nocy padało.
apparently at night-SG.LOC rain-PAST.IMPRFCTV.3SG
'Apparently it rained at night'

d. Zdaje się, że będzie padać.
seem-PRES.3SG REFL that be-FUT.3SG rain-INF
'It seems that it's going to rain'

e. Anna pewnie będzie w swoim biurze.
Anna probably be-FUT.3SG in his/her office-SG.LOC

‘Anna will probably be in her office’

f. Rzekomo, zatrudnią kogoś
allegedly employ-PRES.3PL someone-SG.GEN
nowego.
new-SG.GEN
‘Allegedly, they will employ someone new’

Perception verbs like subject-percept verbs (exemplified by *wyglądać*, ‘look’’, in (6.5) a.) or predicative verbs (like *widać* in b. above) illustrate deductive evidentiality. In the case of both sentences, the speaker judges the situation and bases his/her deduction on the judgment of Anna’s appearance or her attitude towards dogs. Similarly, particle *widocznie* (‘apparently’) or verbal expression *zdawać się* (‘seem’) illustrate deductive evidentiality. Again, the evidence is visual: wet ground, puddles etc., or the look of the sky, heavy clouds etc. Based on the evidence, the speaker judges the situation and comes up with a conclusion.

Evidentiality and epistemic modality also combine in the case of assumptive evidentiality, as illustrated by (6.5) e. Here, the speaker has no sensory evidence for the proposition, the assumption is based on the speaker’s knowledge or experience: I know Anna and her habits well enough to come to a conclusion that she is in her office.

Epistemic extension can also be found with reported evidentiality. Sentence f. is an example of hearsay. *Rzekomo* (‘allegedly’) in this sentence indicates that the speaker distances himself/herself from the information presented in the proposition, the speaker does not believe it to be true.

6.2. EVIDENTIALITY AND PROPOSITION

The final issue to be addressed in this chapter is whether evidentials should be analysed as propositional operators, that is, operators qualifying the truth status of the proposition expressed in a sentence. Faller (2002: 99) discusses the issue of whether evidentials are propositional operators based on the analysis of Cuzco Quechua. She notes that linguists disagree as to whether evidentials should be described on the propositional level, and that the analysis depends on how epistemic modality is perceived by a given linguist: if

epistemic modality is analysed on the propositional level meaning, evidentiality is treated the same, and *vice versa*. This, however may not always be the case since, in some languages, epistemic modality may be treated as a propositional operator, and evidentiality not. For epistemic modality, Faller concluded that it should be analysed as a propositional operator because "(n)ot only can the modal force be (dis)agreed with, its truth can be directly denied", the assertion made by a modal is weaker than that made by a non-modal expression. The above statement does not hold for Quechuan evidentials, though: assertions made with evidential marker *–mi* "are intuitively stronger than assertions without it" (Faller 2002: 156)[15].

Example (6.6) below proves that epistemic modality can be analysed as falling within the proposition (Faller 2002: 112-3):

(6.6) a. If it's snowing down here, Truckee must be buried in snow.

b. That's not true. A hundred years or so ago, it snowed down here, but not a single flake in Truckee. So, it could well be that it's not snowing now in Truckee at all.

The speaker of (6.6) b. denies not the proposition that 'Truckee is buried in snow' but the "logical relation postulated by the speaker" of (6.6) a. (Faller 2002: 113).

Following Faller's analysis, it is possible to check whether lexical expressions with evidential meaning in English and Polish contribute to the proposition expressed. (6.7) below illustrates the use of a perception verb for direct evidentiality:

(6.7) a. I saw Anna last night.

b. No, you didn't. It was Barbara.

The speaker of b. does not deny the 'seeing', but rather what was 'seen'. The subject-perceiver verb *see* does not function as a propositional operator, similarly to *look* below:

[15] Faller (2002) employs a 'challengability test' to prove that epistemic modals are within the scope of the proposition, while the Quechuan evidentials are not. She finds the results inconclusive, however, therefore she runs additional test to prove her hypothesis.

(6.8) a. Anna looks tired.

b. No, she doesn't. I think she's angry, not tired.

The speaker of b, above again, does not deny the way the speaker of a. has acquired his/her information, but the proposition 'Anna is tired'. Again, *look* does not contribute to the proposition.

A different situation can be observed with modal verbs *must* or *will* used for inferred evidentiality:

(6.9) a. Susan must be in her office, the lights are on.

b. It can't be Susan, she is away on holiday today.

The speaker of (6.9) b. does not agree with the inference that 'Susan is in her office', rather than with the proposition. It can be concluded that *must* has a scope over the proposition, like *will* below:

(6.10) a. Peter will know what to do. He always does.

b. He might not. He didn't have a clue what to do last time we were in trouble.

Again, the proposition 'Peter knows what to do' is not denied, but the assumption that 'Peter will know what to do'. Both modal verbs (*must* for deductive and *will* for assumptive evidentiality) are within the proposition.

Sentences (6.11) - (6.13) illustrate a few examples from Polish. It is hard to find unequivocal examples that would have an expression with evidential meaning contributing to the proposition. Sentences (6.11) and (6.12) illustrate the use of perception verbs for direct and deductive evidentiality, respectively:

(6.11) a. Widziałam wczoraj Piotrka
see-PAST.IMPRFCTV.1SG.FEM yesterday Piotrek.ACC
'I saw Piotrek yesterday'

b. Nie, to był Paweł.

No it be-PAST.3SG Paweł-NOM
'No, it was Paweł'

The speaker of b. disagrees with the proposition postulated in a., subject-perceiver verb *widzieć* ('see') is not negated, therefore (visual) evidentiality above is not within proposition. Similarly, subject-percept verb *wyglądać* ('look') used in (6.12) a. below does not contribute to the proposition of the sentence:

(6.12) a. Anna wygląda na zmęczoną.
Anna-NOM look-PRES-3SG PROP tired-ACC
'Anna looks tired'

b. Bardziej na złą niż zmęczoną.
more PREP angry-ACC than tired-ACC
'More angry than tired'

Again, the speaker of sentence b. disagrees with the proposition 'Anna is tired', not with the deduction of the speaker of (6.12) a.

A different situation is presented in (6.13) below. Here, the verb *być* ('be') is used to express assumptive evidentiality:

(6.13) a. Piotrek będzie znał
Piotrek-NOM be-FUT.3SG know-PAST.PART.3SG.MASC
odpowiedź.
answer-SG.ACC
'Piotrek will know the answer'

b. Może nie znać, ostatnio nie
may-PRES.3SG not know-INF lately not
znał odpowiedzi na
know-PAST.3SG.MASC answer-SG.GEN for
moje pytanie.
my question-SG.ACC
'He might not. Lately, he didn't know the answer to my question'

The speaker of (6.13) a. bases his/her assumption on previous experience with Piotrek (he's always known answers before). However, the speaker of sentence b. disagrees with the speaker of a. This time it is not the proposition 'Piotrek knows the answer' that is denied, it is the assumption of the speaker of a. that 'Piotrek will know the answer'. As such, *być* ('be') contributes to the proposition of the sentence.

6.3. EVIDENTIALITY AND EPISTEMIC MODALITY – CONCLUSIONS

There is an ongoing debate in the literature on whether evidentiality should be treated jointly with epistemic modality, completely separately, or the maybe there is an overlap of the two categories. The view postulated in this thesis is that, following Palmer (2001), there is an overlap between the two categories. The relationship between evidentiality and epistemic modality, however, depends on a language: those with 'pure' evidential systems rarely have epistemic overtones (Aikhenvald 2004). In other languages the overlap can be clearly seen. English, for instance, uses modal expressions, which have evidential overtones, to denote deduction or assumption. Modal expressions, however, are not the only items that denote evidential and epistemic meanings. Subject-percept perception verbs can also be interpreted as an overlap between the two categories, since they present the speaker's judgment: based on direct evidence the speaker concludes that something is the case.

Discussion of modality often involves the discussion of whether modality contributes to the proposition expressed in a sentence or not. Because of the relation between epistemic modality and evidentiality, it is possible to assume that evidentiality may relate to the proposition in the same way as modality. As discussed in chapter 6.2., this is not always the case. Faller (2002) proves that epistemic modality contributes to the proposition, while analysed by her evidential enclitics in Cuzco Quechua do not. It does not mean, though, that it is possible to assume that evidentiality generally is not within proposition. As has been demonstrated on the examples from Polish and English, it depends not only on a language analysed, but also on the lexical item in question. English modal verbs *must* and *will*, not surprisingly, are within the proposition, as is Polish modal operator *być* ('be') used for inferred evidentiality. Direct evidentiality, on the other hand, lies outside proposition: it is indeed difficult to deny direct perception of the speaker. It is

not possible to give an absolute answer to the question whether evidentiality is within proposition: the issue needs to be analysed in more detail in various languages, especially since it is impossible to give one definite answer in the case of English or Polish.

To sum up, the relation between epistemic modality and evidentiality is a difficult issue to discuss. Languages with 'pure' grammaticalised evidential systems do not usually combine evidential and epistemic meanings in their evidential markers, whereas in languages like English and Polish, the overlap between the two is more clearly visible, especially because of the use of modal expressions to indicate inferred evidentiality. The relation becomes even more complicated when an issue of whether evidentiality, like modality, contributes to the proposition or not. Again, the answer depends on a language and requires more research.

CONCLUSIONS

The aim of this thesis has been to present a unified, synchronic account of evidentiality in English and Polish. Literature search proved that neither of these languages has been analysed in depth so far. Chafe (1986) describes Evidentiality in conversational and written academic English. Gisborne (1998, 2010) looks at evidential meanings encoded in English perception verbs. Some examples of English sentences with evidential meanings can be found in the works of other linguists, but they are random and unorganised. Evidentiality in Polish, on the other hand, was only addressed by Weimer (2006) who concentrates mostly on reported evidentiality. None of the accounts is exhaustive, though. Therefore, the aim of this work has been, not only to collate the findings provided in the literature, but also to extend and deepen the analysis of evidentiality in English and Polish.

As a fairly recent area of research, the study of evidentiality is still an ongoing process. For that reason, definitions of evidentiality vary from linguist to linguist. In the first chapter I presented the ideas of a few main researchers in the field (Aikhenvald 2003, 2004, De Haan 2003a, b, 2005, Palmer 1986, 2001, Rooryck 2001a, b) to illustrate that definitions of evidentiality may drastically vary depending on who does the research and the language(s) being researched. The review of the literature addresses a few important issues that are discussed when analysing evidentiality: the relation between evidentiality and other semantic (epistemic modality) and grammatical (tense, aspect, person, etc.) categories, but most of all, the question of a uniform definition of evidentiality and categorisation of its types.

In chapter 2, I re-addressed some of the issues touched on in chapter 1, mainly, what evidentiality is and the categorisation of its semantic meanings. Evidentiality in this chapter was presented as a grammatical and semantic category, separate from other categories such as epistemic modality (though allowing for an overlap between the two) or tense, aspect, number, etc. Evidentiality can be organised into two main semantic types: direct (pertaining to personal sensory perception) and indirect (inferred and reported). This chapter served as a basis for the analysis of evidentiality in English and Polish in subsequent chapters.

Chapter 3 discusses evidentiality in English, while chapter 4 – in Polish. Evidentiality is studied in many languages, but the focus is on those with grammaticalised evidentials, *id est.* an obligatory evidential verbal paradigm or a set of particles. Neither English nor Polish have obligatory evidentials. Evidential strategies are present in various lexical items. Among them, perception verbs constitute a large set. Argument structure and complementation patterns influence the meaning of perception verbs, therefore they are highly polysemous. Perception verbs, of course, are not the only items with evidential meaning. Other words and expressions are: modal verbs, adverbs, verbs *seem* and *appear*, or reported speech in English, and modal verbs, particles, adverbs and other expressions in Polish. Both chapters finish with tables and conclusions to provide a brief illustration of the main lexical items used for each type and sub-type of evidentiality.

Chapter 5 illustrates the interrelation between evidentiality and other grammatical categories: person, tense, aspect, negation and sentence type (question and commands). It was demonstrated that it depends on a language whether there is an influence of a chosen grammatical category on evidential meaning.

The last chapter of the thesis, chapter 6, addresses the questions of the relation between evidentiality and epistemic modality and whether evidentiality lies within proposition. Illustrated by examples from different languages, it was demonstrated that, even though evidentiality and epistemic modality are two separate semantic categories, they may overlap depending on a language being analysed. Some languages have 'pure' evidential systems, but some evidentials may acquire epistemic overtones, while some languages use epistemic modals for inferred evidentials, for instance (English is a great example). The question of whether evidentiality contributes to the proposition of a sentence, however, remains open. Further research across various languages is needed to give unequivocal answer. The analysis presented in chapter 6, however, indicates that the answer depends not only on a language, but on an analysed grammatical or lexical item as well: *must*, for instance, used for deductive evidentiality, contributes to the proposition, while perception verb *see* does not.

This thesis presents an organised account of evidentiality in English and Polish based on (scarce) literature, supplemented with examples provided by the author (mostly in chapters 3 and 4). The analysis of different evidentiality types in English and Polish reveals that both languages use a number of words and expressions, some of which are

polysemous as the evidential meaning they encode depends on the argument structure or complementation patterns. The analysis also proves that evidential and epistemic meanings overlap in the lexical items used in both languages: modal verbs, perception verbs and others. As it has been mentioned before, research regarding the analysis of evidentiality is a relatively new branch of study and this thesis can be used as a basis for further, even more in-depth analysis of the evidentiality in English and Polish.

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http://usjp.pwn.pl – Uniwersalny słownik języka polskiego (Universal Dictionary of the Polish Language)